The Lettsomian Lectures
ON
SYPHILIS AND THE NERVOUS SYSTEM.

Delivered before the Medical Society of London,

BY W. R. GOWERS, M.D., F.R.S.

LECTURE II.

MR. PRESIDENT AND GENTLEMEN,—From the questions of pathology and causal evidence that occupied us in the last lecture, we pass to-night to subjects of more immediate practical interest—those of symptoms and diagnosis. The transition may, perhaps, bring with it a sense of relief, but unfortunately it brings with it no escape from the difficulties in which the subject is involved, and which surround, not less closely and scarcely less consciously, its practical aspects.

First, however, I should supply one omission in the last lecture. To the long list of maladies, the certain or supposed consequences of syphilis, should be added some of the functional diseases of the nervous system. By some authorities it is thought that such diseases as epilepsy, hysteria, insanity, and neuralgia, in their purely functional forms, are frequent consequences of the influence of the virus on the nerve elements, during the period of its greatest activity. Time fails me for any discussion of the subject, but there are two points that are especially important in any examination of it. The first is that if any special form of functional disease seems to be exclusively related to syphilis, it is essential that the positive evidence from the side of syphilis should be supplemented and confirmed by negative evidence—that these forms do not occur apart from syphilis. Secondly, if the forms associated with syphilis are not special, it is needful to consider most carefully the question of indirect causation. The causes of these diseases are many and various, and they are widely prevalent. Some of the most potent are involved in the conditions and influences inseparable from the constitutional malady and its treatment, in which physical depression, mental annoyance, are sometimes combined with the reaction from a life of intense excitement of body and mind. It is also necessary to ascertain, and allow for, every traceable predisposition, and likewise to see that the therapeutic evidence is secured from fallacy by a rigid observance of the conditions that were mentioned in the last lecture. I suspect that these measures would alter considerably the aspect of much of the evidence on which the opinions rest.

In the study of symptoms, not less than in the region that we have already traversed, we still feel the pressure of the antagonism I mentioned at the outset. The success, incomplete though it be, with which we are able to treat syphilitic diseases of the nervous system, renders it impossible to obtain a knowledge of their symptoms as extensive or as certain as we have gained in the case of most other maladies. We can attain certainty, or at least the high probability which in medicine has generally to do duty for certainty, only by confining our attention to cases in which post-mortem evidence places the nature of the disease beyond doubt. But if we thus restrict our attention to these certain facts, and our inference to the sure conclusions we can draw from those facts, our knowledge will be at once small in extent and imperfect in character. It will be based only or chiefly on cases of great severity, and the effects of slighter forms and degrees of disease will to a large extent escape us. If we include the latter in our investigation, we are upon ground which is always insecure, and often treacherous; for an uncertainty, varying with the knowledge and care of the observer, will attach to a large number of our conclusions. This uncertainty must, it seems to me, be frankly admitted. If we recognise its existence, if we employ the probable conclusions as such, and do not impute to them the certainty they lack, we may use them, or many of them, without much risk of being misled. To obtain the greatest practical power, we must, on the one hand, be often content with probabilities that are not high; but, on the other hand, we must use these probabilities as such and trust them only so far as their nature warrants.

In the practical diagnosis of these diseases, just as in their scientific investigation, it is necessary to weigh carefully each step in the reasoning, and to do so far more carefully than in the case of many other diseases. The amount of conscious and deliberate attention to the process of inference which it is desirable to give varies much in different kinds of disease. It should always be reduced to the least amount that is consistent with safety. Did we weigh with care each step in every diagnostic act, the limits of patience and of life would be reached before a quarter of the work had been done that might otherwise be accomplished. Here, as so often, our work has to be based on a compromise between the ideal and the adequate. Unconscious inference enters, of course, largely into the simplest so-called "observations," and into such diagnosis as seems to consist of pure observation. Still larger is its share in the recognition of diseases that are inaccessible to direct observation, and yet yield "physical signs" of their presence. Yet in the latter case we can allow it to remain unconscious without much risk of error, and we habitually do so, and even speak of "finding" a pneumonia or a pleurisy without a suspicion of error in our language, although we really infer the existence of the disease by a series of mental processes that would be of considerable length if the steps were distinguished. Our short cuts in such cases involve little danger to an observer who has been properly trained. But the lesions of the nervous system are wholly beyond the range of observation, however aided; and, with all our looseness in the use of words, we do not speak of "finding" a cerebral hæmorrhage, or even a cerebral tumour, during life. In purely inferential diagnosis, in which the disease manifests itself only by effects that are indirect, and, indeed, often doubly indirect—the effects of effects of the lesions,—we cannot dispense with the careful consideration of each step we take. This statement is eminently true of the diseases we are now considering, because in them we have to deal not only with the character of the lesion, but also with its nature.

The fact indicated in the last words, is the first important consideration in regard to the nature of the diagnostic process. The process is, and must be, always a double one; and of these two parts one should always be taken before the other. We should always ask what is the nature of the morbid process before we attempt to decide whether or not it is specific and due to syphilis. In greater detail the essential steps are these: 1. What are the seat of the lesion, as indicated by the symptoms, and its nature, as shown by their course? 2. Is the process thus indicated one of those that may be syphilitic? 3. Has the patient had syphilis? 4. Can any other cause of such a morbid process be traced? 5. Lastly, and subsequently, we have to see whether the result of treatment confirms our conclusion. The last element is different from the rest in character, and separate in time. Its consideration involves questions that will come under our notice in the next lecture, and are, moreover, essentially those we examined in the scientific use of the therapeutic test. They need not therefore detain us to-day. But the other steps we must consider in the abstract, because the only mode of dealing with these cases, of avoiding error, and reaching as sure a conclusion as the conditions permit, is to treat each case as a new problem, irrespective of other cases or generic types, and to work it out by taking each step separately, and comparing them only at the end of the process.

One of these questions—whether any other cause can be traced—may seem superfluous when we are dealing with processes that have no other cause than syphilis. But this statement is true only of the pathological lesion. Most syphilitic processes have their analogues in other processes that are not syphilitic. The effects of the two on the nerve elements may be the same, and the symptoms due to those effects may be the same. A gumma of the cortex and a glioma in the same part may produce identical symptoms. The consequences of the occlusion of an artery by syphilitic disease and by embolism may absolutely correspond. The element of specificity, therefore, is wholly absent during life. There are no symptoms of which we can say, as we can of post-mortem aspect, "this proves a specific lesion." There are no symptoms, and no combinations of symptoms, produced by syphilis that are not also produced by other disease.

While all specific processes have their simple analogues, there are many simple processes that have no specific analogues, and many of these processes are expressed by characteristic symptoms. Some of these simple processes may be due to syphilis, as we have seen, but even then they are not specific; so far as we can discern, they are simple. If they are due to syphilis, they are certainly not influenced by treatment as the specific lesions are. Thus, while there are no symptoms that prove a specific lesion, there are many symptoms which prove that a lesion is non-specific. Hence arises the paramount importance of considering, in the first instance, what character of lesion the signs indicate. To neglect this question—to conclude that, because a patient has a disease of the nervous system and has had syphilis, that the disease is syphilitic—is a proceeding precisely the same as if we assume that a subcutaneous swelling in a syphilitic patient is a gumma, without feeling its consistence or observing its characters, or as if we assume that a sore throat is specific without looking at it. If a syphilitic person has an attack of hæmatemesis, it would not be considered quite logical to assume at once that the hæmatemesis was of syphilitic origin, and yet observed facts actually afford more justification for this opinion than for the conclusion that paraplegia of absolutely sudden onset is due to syphilis. We know that syphilis has caused hæmorrhage into the stomach, but we do not know that it has caused hæmorrhage into the spinal cord.

Thus a consideration of the kind of lesion that must exist to cause the symptoms may enable us to say one of two things—either that the process is one that may be specific, or that it is one that cannot be specific. To deal with these indications in detail would be to enter into the whole region of the diagnosis of diseases of the nervous system. There are, however, two conditions to which almost all specific lesions conform, one of time, the other of place. First, true specific lesions are generally subacute or subchronic. An acute onset—acute, not actually sudden—practically means acute inflammation, and we saw in the first lecture that the occurrence of acute syphilitic inflammation must be considered as still *sub judice*. As a matter of fact, the symptoms of certainly specific lesions very seldom develop to a considerable degree in less than a week. They are also very seldom actually chronic, seldom occupy more than three months in development. An actually sudden onset, however, is not at all rare; it is the common onset of the symptoms due to vasular occlusion. With these exceptions, when symptoms develop in a few days or many months, they are not likely to be due to a true specific lesion. The degenerative sequelæ are of course chronic in onset, but they are not truly specific. Moreover, the chronic interstitial inflammations, doubtfully specific, are also chronic. Secondly, as to place. The specific processes are, as we have seen, outside the nerve elements, and they have therefore no special relation to nerve function. Hence their effects are random in distribution. They are related to a special function only when that function is subserved by one region, and this is too rare to be of practical importance. As a general rule, if we find certain structures of common function picked out for isolated impairment from among others of different function, we may be sure that we have not to deal with a true specific process. It may be a post-syphilitic degeneration, but it is not a really specific lesion. These two indications are thus chiefly of importance as enabling us to exclude processes that are not specific.

Assuming that we have evidence of a process that *may* be specific, we may be able to go a step further and say that, from the symptoms, it is *likely* to be specific; but the next important step is to ascertain whether, in the case before us, this possible cause can be traced. Syphilis may be a cause of the lesion. Is this particular cause an actual antecedent in the case before us? In every department the fact that a certain cause can be traced may always justly be allowed weight in diagnosis. It must never take precedence of more direct evidence of the nature of the lesion, but in due subordination it is an indication of great value. Hence the next question is, Has the patient had syphilis? At least, this is the form in which the question is commonly put; and in many cases this form is sufficient. But we must not be content with a negative answer. We have already seen that some of those who have had syphilis do not know it. We have seen the necessity of recognising this fact in the scientific investigation, and it is equally important in respect to practical diagnosis. We cannot absolutely exclude syphilis unless we can exclude infection. The disease is so seldom contracted, except in one way, that we need not take other possibilities into consideration. Hence, if there has been any chance of exposure to infection, the disease cannot be considered to be out of the question. The truth and importance of this will be doubted by no one who has seen much of the late effects of syphilis, but to those under whose notice such effects seldom come the statement may seem scarcely credible.

In connexion with this point, the question arises, What influence should the uncertainty as to the fact of syphilis have on the diagnosis? How far should probability of the syphilitic nature of the lesion be diminished by the improbability of past syphilis, and *vice versâ*? I think that the common error is to allow too much weight to this element of uncertainty, but it is an error that is not easily avoided. The symptoms in a given case are of such a character that their cause may be a syphilitic process; if the patient is known to have had syphilis, the syphilitic nature of the process seems more probable than if his syphilis is doubtful. It is probably right to attach some weight to the point, but it should be attached to the element in the diagnosis to which it properly belongs—the element of probability. It must not be allowed to influence any distinct indications of either a positive or negative character. If, for instance, the symptoms are such as distinctly indicate a syphilitic lesion—a lesion scarcely ever due to any other cause,—it is evident that this indication is not really influenced by the fact that the influence of syphilis is inconclusive, provided the disease is possible. On the other hand, if the symptoms are such as to make it most unlikely that the process is syphilitic, this improbability is not materially lessened even by a certainty that the patient has had the disease. If, however, the various indications are equally balanced, the improbability of syphilis may be allowed weight.

If the lesion is one that may be syphilitic, if previous syphilis is certain or possible, the question arises, Can any other cause of such a morbid process be traced? If some other cause exists the difficulty is greatly increased. The diagnosis then depends on a comparison of the precise character, first, of the lesions produced by the two causes and that presumed to exist in the case before us; and, secondly, on the symptoms by which the lesions are manifested, and the symptoms presented by the patient.

This abstract outline of the process of diagnosis may seem to you needlessly complex. You may think that the considerations are purely theoretical, but they actually represent, in the simplest form, the essential processes adopted in actual diagnosis. I give them in the abstract, because their concrete application varies in each case, and for their effective use familiarity with their principles is essential. It must, however, be frankly admitted that exact diagnosis of the nature of these specific lesions is sometimes impossible. The symptoms are often equivocal; they are such as may be produced by more than one syphilitic process. But we can generally reduce the possible lesions to two, and see a balance of evidence in favour of one or the other.

We may now consider the symptoms of one or two of these specific processes, and first of syphilitic growths. A gumma causes, for the most part, symptoms like those of any other intra-cranial tumour of rapid growth—general cerebral symptoms, and focal symptoms due to the local influence of the growth. Their special features are never more than suggestive. They depend on its course, and also on the fact that gummata are rather more frequent in certain parts than in others. The course, like that of other specific lesions, is subacute or subchronic; the seat is generally superficial, in the cortex or at the base, sometimes within the pons, seldom in the cerebellum, occasionally in the thalamic region, growing in from the side of the crus. Hence symptoms of cortical irritation are relatively more frequent than in other tumours; convulsions are common, and give most important information from their local distribution or commencement, or from the aura that equally indicates the spot at which the discharge begins. But all these indications, even when combined, furnish no absolute, or even approximate, ground of distinction. They may be, and indeed often are, produced by growths of other nature, especially by gliomata of rapid growth. The indication afforded by the course of the symptoms is chiefly useful for its negative significance; a very chronic growth is not likely to be

syphilitic. On this point we may often gain instructive information from the optic neuritis that is so often present. Syphilomata always causes an acute form of optic neuritis, becomes intense. A rapid growth never causes a chronic form of neuritis, although now and then a slow growth may cause an acute form. Hence, while acuteness of the neuritis is of little diagnostic value, chronicity—a neuritis that remains for a long time moderate or slight in degree—is distinctly opposed to the diagnosis of a syphilitic growth, and adds considerable weight to the similar indication afforded by great chronicity of other symptoms. This indication is especially valuable when the early symptoms are equivocal, and we find it difficult to say how long the tumour has existed. These growths are among the specific lesions in which the effect of treatment is of most diagnostic value. It usually causes a prompt diminution in the symptoms, but, to be of significance, this effect should be considerable, and should involve both sets of symptoms, the local and general. It is a remarkable but certain fact that a considerable diminution in the symptoms of other kinds of tumours, and especially in the general symptoms, sometimes follows the administration of iodide. The effect is most frequent in gliomata, and these are the growths that otherwise give rise to most difficulty in diagnosis. Sometimes even the optic neuritis lessens, but more often it is unchanged, and this should put us on our guard. In estimating the significance of the subsidence of the neuritis, we must remember that every intense inflammation, when it has reached its height, tends to subside into a cicatricial atrophy, although the tumour that has caused it continues to grow. We must not mistake this natural subsidence for the result of our treatment. But this difficulty can often only be met by waiting. If any of the symptoms return or increase, if any symptom persists that would be readily influenced were the growth syphilitic, we must assume that this nature is not probable. The delay involved cannot be avoided, but it is a grave disadvantage, since the progress of surgery has so greatly increased the need not only for exact but for prompt diagnosis.

The chronic local meningitis of syphilis causes distinctive symptoms chiefly when it affects the base of the brain and damages the cranial nerves, or when, at the convexity, it implicates the motor region. The symptoms are such as indicate a surface lesion, and the absence of the signs of any considerable loss of function of the subjacent tissue, such as considerable compression would cause, is the chief distinction from a gumma in the same situation. Especially when the symptoms indicate a wide area of irritation with merely superficial damage, the diagnosis can be made with considerable probability. This focal meningitis is probably less frequent at the convexity than is the growth, and it is certainly less frequent than it is at the base of the brain. In the latter situation the most important symptoms are due to the damage to the cranial nerves, and the most important diagnostic points are well known. The therapeutic test is available only in recent cases of meningitis. When the development of the new tissue into fibres has set in, this seems to go on in spite of treatment, and the inevitable cicatricial contraction may perpetuate the damage produced in the more active stage. In a case of focal meningitis that has lasted for some months, although it may afterwards be found to be syphilitic in nature, the symptoms are generally influenced but little, and occasionally not at all, by anti-syphilitic treatment, however energetic. The other forms of meningitis, interesting and important as they are, I am compelled to pass over.

(To be concluded.)

HARROGATE BATH HOSPITAL.—The governors and subscribers held their annual meeting at the Prospect Hotel on the 19th inst., Mr. Basel T. Wood in the chair. The annual report (the sixty-third) stated that 5180 baths had been administered during the year, a decrease on the previous year of 590. The honorary medical officer's report sets forth that 603 cases had been treated in the hospital, including skin disease 218, rheumatism 329, and diseases of the liver 45. No deaths had occurred. Great progress had been made in the new buildings, and the committee hoped they would be ready for occupation by the end of March next. Lord Harewood had presented to the charity three-quarters of an acre of land, including a small wood of pine trees, which would be added to the gardens.

ABSTRACT OF THE

Presidential Address

Delivered at the Neurological Society of London, on January 24th, 1889,

BY JONATHAN HUTCHINSON, F.R.S., LL.D.

MR. HUTCHINSON'S address, after thanking the Society for the honour of electing him president, proceeded to deal with certain subjects in which surgery and dermatology were concerned in diseases of the nervous system. He mentioned a case which had recently come under his care, in which a man, after the ordinary operation for piles, suffered from permanent incontinence of urine and fæces. The incontinence was attended with loss of sensation in the skin about the anus, and complete paralysis of the sphincter. Similar conditions being apparently present in the urethra, the history made it probable that this condition of paralysis had been present from within a day or two of the operation. After discussing the associated innervation of the two sphincters, attention was asked to the very common occurrence of inability to empty the bladder after the operation for piles, and the question proposed as to how such occurrences were to be explained.

The subject next considered was that of "dry mouth," for which the name "xerostomia" was proposed in substitution for that of "aptyalism." The cases which have recently been under the consideration of the Clinical Society, with some others, were briefly reviewed, and the whole question considered as an important illustration of the influence of the nervous system in controlling and entirely arresting the secretion of glands. It was suggested that what we see demonstrated in the mouth in cases of xerostomia may occur in other regions and viscera, and that there may possibly be a neurotic arrest of secretion of the liver, pancreas, testes, &c. Some remarks were made on the converse condition of excessive secretion of fluids into the mouth, or "hydrostomia." It was thought that this was much more frequently a symptom of aggressive disease of the nervous system than the opposite condition of dry mouth appeared to be. Attention was next asked to the nervous phenomena in Raynaud's disease, and to various cognate conditions in which the supply of blood to different parts of the skin is injuriously influenced through the nervous system.

The chief subject matter of the address was, however, the consideration of those diseases of the skin which should be classed as neurotic. Putting aside derangements of nutrition of the skin which may follow upon injuries, it was proposed to class the disorders referred to under three heads. First, those due directly to disease of the nerves themselves, or to some trophic influence exercised by them; secondly, those due to disturbance of the circulation produced through nerves; and lastly, those in which the nervous system, although not being directly concerned, still took some share in the way of general reduction of tone. In the first and by far the most definite group, herpes and morphœa, or scleroderma, were the principal examples, and concerning both of these Mr. Hutchinson entered into considerable detail. Attention was asked, in reference to herpes, to the remarkable fact that while common zoster rarely occurred twice in the same patient, and rarely twice in the same place, there were forms of herpes of which the peculiarity was liability to recurrence. It was asserted that, while arsenic very frequently caused zoster, it acted almost as a specific in preventing recurrences of the other forms. The theory was upheld that herpes zoster was always due to a peripheral neuritis, which involved the end organs; that it was, in fact, as had been long ago said, a neuritis attended by an eruption. It was suggested that one great difference between zoster and the recurrent forms consisted in the severity of the neuritis in the former, which disorganised the nerve affected and thus prevented the possibility of its being again attacked. In dealing with the subject of scleroderma (morphœa), Mr. Hutchinson took first the localised form, remarking that it was very different, though perhaps not belonging to a wholly distinct class,

from that in which the affection is symmetrical, diffused, and in greater or less degree of severity universal. He repeated an assertion which he had made, he said, many years ago, that all the main facts which are here as regards the development and evolution of zoster are here also as regards morphœa. He held that it was certainly located in, and in all probability produced through, nerves. Its remarkable differences from zoster were its slowness of evolution and its long persistence; taken together with the fact, it was not at all uncommon to find it affecting several parts of the body or limbs at the same time. He believed that its earliest manifestation was always in the form of a cluster of spots, and that the large patches often seen at a later stage were always due to a confluence of these. He drew attention to the circumstance that fascia, muscles, and bones were not unfrequently affected together with the skin, whilst comparatively little loss of sensation attended the stages. He thought it highly probable that the vaso-motor filaments, distributed in conjunction with those for motion and sensation, were the parts chiefly affected. The remarkable defects in the subsequent nutrition and growth of the parts affected were illustrated by photographs and drawings. Respecting the condition known as hemi-atrophy of the face, it was contended that it was always the consequence of morphœa affecting the fifth nerve; and that it was not strictly an atrophy, but an arrest of development, to be explained by the fact that the disease had occurred in early life before the parts had attained their full growth. A number of portraits were shown to illustrate the remarkable similarity of appearance in different examples of this singular condition.

Some remarks next followed on the general principles which should guide us in respect to whether any given disease was of neurotic origin or otherwise, and the need for increased caution in suggesting such origin was strongly enforced. Diseases of the skin directly due to nerves should, it was contended, always display certain definite features as regards the distribution of their patches. These patches ought always to be racemose or corymbiform. The coalescence of such spots might produce a long oval patch, but such patch ought always to be more or less irregular at its edge, and would almost always be attended also by outlines. No eruption produced directly by nerves could possibly assume a rounded form. The terms areate and circumscribed could never be applicable to disorders of nutrition located by the filaments of nerves. Under this rule it was held that such diseases as alopecia areata and leucoderma were certainly not of neurotic origin. A second rule was that disorders originated by nerves never spread serpiginously—that is, they do not creep at their edges by infection of adjacent parts, as lupus, psoriasis, and leucoderma, with many others, so conspicuously do. On account of the slowness of its evolution and the difficulty in making sure in its early stages of its precise limits, mistakes had occurred in respect to scleroderma on this point, and in not a few cases it had been asserted to spread at its edge. That in a general way such tendency to spread was conspicuously absent there could not be the slightest doubt.

Hebra's observation as to the occasional corymbiform arrangement of the pustules of small-pox was next adverted to, and with it were mentioned the disease described by Dr. Duhring under the name of "dermatitis herpetiformis," and certain forms of lichen ruber and of some syphilides, which may also assume the corymbiform arrangement. It was admitted to be possible that in many diseases not primarily affecting the nervous system, a tendency to peripheral neuritis might exist, which would explain the peculiar arrangement of the foci of inflammation in the skin.

The question was next asked whether any disease produced by nerves could be arranged in lines or streaks, and, in reference to this, the very remarkable conditions presented in congenital ichthyosis in streaks were discussed. Although these streaks had been assumed to be neurotic, there were, it was remarked, great difficulties in accepting such a theory. The streaks often did not follow the course of any known nerves, nor was it easily comprehensible that the transit of a nerve trunk deeply placed under the skin should evoke any phenomena along its course. It was admitted that the explanation of these congenital streaked eruptions was extremely difficult. Their arrangement on the walls of the chest and abdomen were often so extremely like that of zoster, that Mr. Hutchinson said he had himself many years ago tendered the crude suggestion that they might be due to intra-uterine herpes.

At the conclusion of the address a number of drawings were exhibited illustrating various points which had been adverted to. With them was shown a very remarkable and, it was believed, unique skull in which all the bones on one side of the head show exostoses with other evidence of overgrowth, of which on the opposite side there is not the slightest trace. In this specimen the right half of the jaw, as well as the bones of the skull, are affected. The state of hyperostosis ending precisely at the symphysis of this remarkable unilateral asymmetry, it was suggested that two explanations were alone possible: either that the disturbances of nutrition were located by the distribution of the fifth nerve, or that they were due to some influence exerted probably during fœtal development. Of the latter nothing was known as to its precise nature, and the former appeared the most probable. A contrast was suggested between the condition of unilateral overgrowth exhibited in this skull and the cases of unilateral undergrowth in the so-called hemiatrophy of the face.

ON THE REMOVAL BY OPERATION OF NASO-PHARYNGEAL TUMOURS.[1]

BY THOMAS ANNANDALE, F.R.C.S.,
REGIUS PROFESSOR OF CLINICAL SURGERY, UNIVERSITY OF EDINBURGH.

THE principal object of this paper is to describe a method of operating which was successfully carried out in three cases of naso-pharyngeal tumour recently under my care. After a study of the several methods suggested and practised by Maune, Nélaton, Whateley, Maisonneuve, Langenbeck, Chassaignac, Ollier, Roux, Hugnier, Cheever, Croft, and other surgeons, I believe that my procedure, although not original in some of its details, is in its entirety new. It is true that such growths have been reached through the palate by Nélaton and others, but not in the simple way presently to be described. As far as I am aware, my operations have demonstrated for the first time the fact that when the alveolar margin and palatal portions of the upper jaw have been divided along their centre rom before backwards, and the bony septum of the nose cut through, the anterior nares having first been exposed by Rougé's plan, the two upper jaws can be separated to the extent of from half an inch to one inch, so as to give access to the posterior nares and base of the skull.

It is freely admitted that a naso-pharyngeal growth may be successfully removed by other "than a cutting operation, and there are a sufficient number of recorded cases to prove this; but there is a very general agreement that in the case of the majority of these tumours some cutting procedure is necessary in order to expose and obtain access to the site of their origin, so that they may be thoroughly removed, and also in order better to control the bleeding which is often profuse during the separation of their attachments to the periosteum and bone. Naso-pharnygeal tumours have been removed by the cold snare, by the galvanic wire, cautery, or écraseur, by evulsion with forceps, by scraping with the sharp spoon, by ligature, and by means of electrolysis; but recent opinion would seem to favour the use of the cold snare or galvanic wire when the case is suitable for a non-cutting operation. Even with improved instruments the success of these two plans in completely removing the growth must be doubtful, owing to the difficulty of acting upon its connexion to the bone, and I am therefore inclined to think that these two procedures might be made more certain if the site of the growth was first exposed by such an operation, as I suggest in this paper, so as to allow the wire to be accurately adjusted, and the tumour removed close to the bone. I have upon several occasions removed naso-pharnygeal tumours by evulsion with strong forceps passed through the anterior nares, the forceps being guided by two fingers of the left hand introduced through the mouth behind the soft palate; but the difficulty of separating completely the attachments of the growths in this way, and the serious bleeding which accompanies the operation, have convinced me that, unless in the case of a small or narrow pedunculated growth, such a procedure is not advisable.

[1] Read before the Edinburgh Medico-Chirurgical Society.

The steps of my operation are as follows. 1. The exposure of the anterior nares by freely dividing the mucus membrane connecting the upper lip and upper jaws, according to the plan of Rougé. 2. The division of the bony septum of the nose along its attachment to the jaw. 3. Incising the soft parts along the middle line of the hard palate, and then sawing through the alveolar margin of the upper jaw and through the entire hard palate along the same line. The soft palate may or may not require division in its middle line. The necessity for this depends upon the size and attachments of the growth. In one of my cases I did not divide it; in the other two I did. 4. The forcible separation of the two jaws, and the introduction through the gap of the finger, periosteal scraper, or other similar instrument, with the view of separating the *secondary* connexions of the growth to surrounding parts. 5. The removal of the growth from its primary site of origin by forceps, sharp spoon, cold snare, or galvanic wire. In all my cases I used strong forceps, assisted by a periosteal elevator and a sharp spoon. 6. When the tumour has been removed, the introduction of some form of antiseptic plug. I generally use a plug of lint soaked in carbolic acid and well dusted with iodoform. 7. The jaws are now brought together again, and secured by one wire suture through the alveolar margin of the bone, and two or more horsehair sutures through the soft parts of the palate wound.

In all three cases the patients were thoroughly anæsthetised, and during the operation the head was placed in a dependent position, resting over the edge of the operating table, as referred to by me in a paper in THE LANCET of Nov. 8th, 1879. In Case 2, preliminary tracheotomy was required because the patient was unable to respire properly when lying upon his back, owing to the pressure of the tumour upon the larynx; but in the other two cases the operation was completed without any difficulty as regards the respiration or flow of blood into the air-passages. Although advocating this special method in cases which demand some cutting operation, I by no means condemn all other plans of procedure, for I believe with Sands that in cases of sarcoma, or in cases in which the attachments of the growth are extensive, the excision of the whole or of a portion of the upper jaw will give the best and most certain result.

In concluding these remarks, I would state what I consider to be the advantages of my method. 1. It is a simple procedure, and if the growth can be removed by its aid no deformity results. 2. Should it be found that the growth cannot be properly exposed and removed in this way, the proceeding forms one usual stage of a more severe operation—namely, the removal of the upper jaw itself,—and therefore it assists and does not interfere with further operative measures. 3. From my experience of operations for the removal of naso-pharyngeal growths, I have a strong opinion that the central section, as advised, is accompanied by less bleeding than most of the other cutting operations practised.

CASE 1.—J. N——, aged nineteen, a strong healthy young man, was admitted into the Royal Infirmary under my care at the beginning of October, 1887. For some months he had been suffering from obstruction in the nasal passages and from occasional attacks of bleeding from the nose, and a few weeks before admission an attempt had been made to remove a growth in the posterior nares with the cold snare, but without success. An examination disclosed a firm tumour, the size of a small orange, in the naso-pharyngeal region; it had a firm attachment to the bone forming the roof of the posterior nares, and was growing downwards, bulging forwards the soft palate. The case was one in which I hoped to remove the tumour by evulsion with forceps, having first performed Rougé's procedure, and on Oct. 24th I put the patient under the influence of chloroform, introduced a strong mouth-gag, and, having exposed the anterior nares by dividing the mucous membrane, I passed a pair of strong forceps through the right anterior nostril, and with the aid of two fingers of my left hand behind the soft palate endeavoured to seize and tear away the growth. The attachments were so strong that I found it impossible to separate them completely, and during these attempts the bleeding was most serious. Feeling it necessary to complete the operation without delay, I at once sawed through the alveolar margin of the upper jaw and the hard palate along their middle line, having first divided the soft parts in the same direction, and then found, somewhat to my surprise, that the two upper jaws could be separated to the extent of nearly one inch. Through this gap I passed the forceps, rapidly tore away the tumour, plugged the cavity, and brought together the halves of the jaw. By this time the patient was almost pulseless, and he remained so until evening, when, as there were no signs of rallying, he was transfused about 10 P.M. This was followed by a marked improvement, and he quickly recovered his strength, and was dismissed cured on Nov. 15th. The plugs were removed two days after the operation. In this case the soft palate was not divided. The structure of the growth was that of a fibroma. The patient returned to report himself six months after the operation. He was then in good health and had no trouble in his naso-pharynx. I have tried to trace this patient so as to learn his present condition; but on writing to his old address I found that he had left, and his place of abode was not known.

CASE 2.—A young man aged twenty, when seen by me, was a patient in the Jefferson Medical College Hospital, Philadelphia, and he was suffering from a large growth in the naso-pharyngeal region. The tumour was not so firm to feel as in the first case, but it was larger, had a broad attachment to the base of the skull, and was very adherent to the soft palate, which was bulged forward to a considerable extent. The patient's respiration was beginning to be affected by the pressure of the tumour, which was diagnosed and proved afterwards to be a sarcoma. The surgical staff of the hospital very courteously asked me, as a visitor to their country, to operate upon the case, and this I did in the presence of many distinguished American and other surgeons upon Sept. 22nd, 1888. Preliminary tracheotomy and the introduction of a short tracheal tube were required, as the patient's respiration was much interfered with by the pressure of the growth during the administration of ether. Rougé's separation of the lip and nose was then performed, the bony septum of the nose nipped across from before backwards, the alveolar margin of the jaw and the hard and soft palates divided in the middle line, the upper jaws separated, and the growth seized with forceps and torn away from its attachments. Very little bleeding took place as compared with other operations for the removal of such tumours, and, the cavity having been plugged with antiseptic gauze, the halves of the jaw were brought together; the tracheotomy tube was removed the same evening, and the patient made a good recovery and left the hospital well. My most recent note of the case in a letter from Professor Gross is that the disease had returned shortly after he left the hospital. In any similar case I would in future prefer to excise one or both upper jaws, so as to ensure the most perfect removal of the disease.

CASE 3.—R. R——, a fairly healthy boy, aged fourteen, was placed under my care by my colleague, Dr. McBride, and was admitted into my wards on Oct. 30th, 1888. Several months before his admission his father noticed that the respiration through the nose was difficult, and in the month of April last he had a severe bleeding from his nose and throat. After this repeated bleedings took place, and an attempt was made to remove a growth through the right nostril. When admitted it was noticed that the nasal breathing was very much obstructed, and that when sleeping he snored loudly. The presence of a naso-pharyngeal growth was easily determined. The tumour was the size of a mandarin orange, was firm to the feel, was broad-based, and had a close attachment to the bones of the naso-pharynx, especially to the upper wall of the posterior nares. The soft palate was bulged forwards, and the tumour was felt to be adherent to it. On November 7th last, chloroform having been given, the attachments of the growth were exposed as in the two former cases. It was found that the body of the tumour was adherent to the soft palate and surrounding structures; but these connexions having been forcibly detached with the finger, it was possible to draw out the whole bulk of the tumour through the gap between the separated jaws, leaving only the primary attachment to the bone and periosteum to be dealt with. The whole tumour was now removed by grasping its neck with strong forceps and tearing it away from its attachment. The bleeding was not excessive, and the patient left the operating table in good condition. As in the former operations, the cavity was plugged, and the two jaws and palate brought together and held in position by means of sutures. The plug was removed upon the following day, and the patient's recovery was thorough and excellent. He left the hospital on Dec. 17th. He was carefully examined on the 11th of this month, and no trace of any growth could be discovered. His nasal passages were quite free.

Edinburgh.

THE PATHOLOGICAL AFFINITIES OF LEAD AND ALCOHOL.[1]

BY NORMAN PORRITT,
HONORARY SURGEON, INFIRMARY, HUDDERSFIELD.

MR. PRESIDENT,—My first duty, as a practitioner in the town which has the honour to number you among its physicians, is to congratulate you and the Society upon your elevation to the presidential chair. In the address with which you opened the session you referred to this mark of your brother members' approval as a compliment to the town of Huddersfield, and, regarding it as such, I believe I am expressing the opinion of all my Huddersfield colleagues when I say that there is none among our number who would more worthily occupy your position, or fill with more dignity and distinction the chair of an important society, such as the Leeds and West Riding Medico-Chirurgical Society.

But, gentlemen, not only may I congratulate the Society upon its choice of president, but I may congratulate myself that I am thus enabled to bring my contribution before the Society under the auspices of one who knows something of the prevalence of lead poisoning in the town of Huddersfield. To account for the prevalence of lead poisoning in Huddersfield it is only necessary to be acquainted with the character of the water-supply. The water-supply is derived from several sources, and it is found that the water from two reservoirs is not only abnormally acid, but has also the dangerous property of dissolving lead, and when left standing in the lead service pipes attacks them and forms a plumbic solution. As is well known, other towns have, or have had, water-supplies which act upon lead. Keighley and Sheffield have each acquired some notoriety.

I purpose to lay before the Society some account of the cases of plumbism I have seen, and it will pave the way for those cases and the deductions I make from them if we briefly consider and compare the pathological effects of alcohol and lead. Noticing, in the first place, that both alcohol and the salts of lead coagulate albumen, we may, for convenience sake, divide their actions into two great groups—(1) the excretory group, and (2) the nervous group.

Turning first to the excretory group of phenomena, we are at once confronted by the action of these substances on the kidneys. Each is a recognished cause of albuminuria, each can play a part in the causation of granular kidney, whilst the subtle power of each to initiate or develop gout is well known. In short, each damages the kidneys, and may set up not only temporary and functional disorder, but even ineradicable organic renal disease. On the other excretory organs, the chylopoietic viscera, the actions of alcohol and lead, though analogous in their ultimate results, are different in their *modus operandi*. Alcohol attacks the liver; lead, the bowels. Alcohol encourages secretion from the mucous tracts; lead diminishes it. But the increased activity of the alcohol-stimulated mucous membrane is more than counterbalanced by the diminution of oxidation which is taking place in the rest of the body. This diminution of oxidation has a counterpart in the case of lead, for, according to Dr. Lauder Brunton, lead has the power of checking the elimination of uric acid.

Both lead and alcohol have a special, a peculiar, and a well-known action on the nervous system. Alcohol is eliminated from the system much more easily and more rapidly than lead, and we are not so familiar with its paralysing effects as in the case of a poison which, like lead, slowly accumulates in the body. As is well known, however, paralysis from alcohol, when given in a dose too large for the excretory organs to get rid of, or when administered in smaller quantities over a long period, is not uncommon. The effects of alcohol are essentially paralytic, as are also those of lead, and there is not only nervous or muscular paralysis, but there are, if I may coin a phrase, excretory and metabolic paralysis.

Then alcohol and lead resemble each other in both being elective poisons. Some men are made tipsy by a quantity of drink which would do no more than serve as a thirst-quencher for others; and, on the other hand, of two individuals imbibing a plumbic solution, the one may suffer the throes of colic, whilst the other escapes any unusual manifestation. Lead has little or no elective affinity for children, or the numerous children of our lead-poisoned patients would surely suffer. Of twenty-two cases of lead poisoning which have been under my care, fourteen were males and eight females. Of the eight females three only suffered severely, and they were all above the age of sixty. The conclusions from these facts are that lead has a greater elective affinity for men than women, a greater elective affinity for women than for children, and a greater elective affinity for old than for young women.

Without denying that there is such a thing as elective action, I would suggest that by professing to explain the way in which lead singles out one of several individuals by the term "elective action," we are in many cases merely glossing over our ignorance by a plausible and pretty figure of speech. There must be some causes for the elective action of lead, and, although in many cases they may elude us, let us endeavour to search for them, and not take refuge in such an empty phrase as "elective action." I suggest, then, as one explanation of this elective action, that whatever hinders metabolism or checks excretion will enhance the susceptibility to lead poisoning. Children with active metabolic processes and vigorous excretory organs rarely suffer. Women, whose kidneys are less often afflicted with Bright's disease than those of men, are less frequently the subjects of lead poisoning; whilst my own cases suggest that young women suffer much less severely than old ones. *A priori* there is a strong presumption that men, from more frequent exposure to sources of poisoning, should suffer more often than women. But this presumption can only be held when the cases of workers in lead are considered. In my twenty-two cases one man and one woman were poisoned by lead other than that derived from lead service pipes. Twenty cases remain—thirteen in males and seven in females, or not quite two to one. In all these cases the source of the lead, on chemical examination, was found to be the drinking water.

Now, in cases of poisoning from a water-supply, it is the wife, and not the husband, who is the more exposed to the poison. She spends the greater part of her time at home; she takes all her meals at home, and often takes supplementary meals or cups of tea when her lord and master is at business. It is, therefore, much more likely that she and her little ones will imbibe more of the toxic material than her frequently absent spouse. The point was illustrated in the case of Milnes *v.* the Corporation of Huddersfield. The plaintiff, a solicitor in Huddersfield, being lead-poisoned, sought for the lead, not in his domestic water-supply, but in the water-supply at his offices in the town. The lead was ultimately discovered in the domestic water-supply which was used by the whole family, but which Mr. Milnes did not suspect, as after breakfast he spent the whole day from home at his offices and business in the town. Notwithstanding, my cases show that more men are affected than women. What is the explanation of this unexpected disproportion? If the lessons of my twenty cases have been rightly understood, I have a clue to the explanation in the greater alcoholic consumption of the male sex.

In the case of Milnes *v.* the Corporation of Huddersfield, Dr. Clifford Allbutt, who appeared on behalf of the plaintiff, was asked, "Have you noticed where people drink spirit-and-water there is a tendency to poisoning?" He replied as follows: "That I have found particularly, and it has struck me in many cases. I do not for a moment think or suppose that the spirit has anything to do with it, but it adds a considerable bulk of water, especially as I daresay in these cases the spirit was not taken very strong, but with a good deal of water, and it adds a very considerable amount of water to the daily ingestion. Two tumblers of spirit-and-water, for instance, which many men might take at bedtime, would add a very considerable amount of water to the ingestion, and it might be that the poison was met by the elective nature which it seems to have." Dr. Clifford Allbutt's explanation is lucid and logical, as his explanations always are, but it altogether fails to account for those cases in which beer, and not spirits, has been the intoxicant.

Examining my thirteen male cases more closely, I find

[1] Read before the Leeds and West Riding Medico-Chirurgical Society, Dec. 7th, 1888.

that one died with all the symptoms of abdominal obstruction; two had wrist-drop; two had general convulsions, with more or less complete unconsciousness. The remaining eight cases suffered from nothing worse than colic, though that is bad enough. All the eight colic cases occurred in working men, and in every case but one there was no evidence to show that the patients were otherwise but steady and usually abstemious men; indeed, one was a total abstainer. Of the five severe cases, three were drunkards or "soakers"; the fatal case was that of a man who worked as a cloth-finisher in a very hot room, had the pot-belly of a drinker, and always drank beer, although his wife never knew him to be the worse for liquor more than three times. Of the two cases in which there was wrist-drop, one man is known to be unsteady, and, though preferring beer, never turns up his nose at spirits. The other wrist-drop case is employed at a hotel, where the opportunities for getting drink are many. Then we come to the two cases where general convulsions with unconsciousness occurred. One of them caused me much anxiety, and when the man's condition was at its worst, as I was leaving his house a neighbour stopped me. The neighbour, after inquiring after my patient, asked me where the lead came from that was poisoning him. I told him the drinking water. He shook his head doubtfully, and said he was sure it could come from nowhere else but the tap of the patient's beer-barrel, the beer having taken it up as it ran from the barrel. The hint thus given was followed up, and I elicited that the patient had drunk beer to excess for some time before I saw him. In the other case with convulsions a similar history was discovered. These men were respectively twenty-eight and thirty-two years of age, and seemed vigorous, healthy men. One I have lost sight of, but the other occupied the same house for three years after his illness, became a teetotaller, and has had the best of health. In none of these five cases was any other inmate of the house affected, although at one house the drinking water contained as much as 1·3 grain of lead per gallon. Each patient was married and has a family, and their occupations did not bring them into contact with lead.

Alcohol, then, has a very powerful influence in intensifying the effects of lead. My friend Mr. Abbott, late of Almondbury, tells me that the worst case of lead poisoning he has seen is that of an inebriate painter; whilst a practitioner in a neighbouring township, where an epidemic of "water-supply lead poisoning" is occurring, assures me that the case of the landlord of a beerhouse is the most severe one he has had under his care.

Although Dr. Clifford Allbutt has observed the frequent concurrence of spirit drinking and lead poisoning, he thinks the increased ingestion of lead-laden water which is taken with the spirit explains what is evidently not a mere coincidence. Here I should join issue with Dr. Clifford Allbutt, and allot a considerable share of the toxic work to the alcohol. As we have seen, both alcohol and lead interfere with metabolism and check excretion. The result is: the alcohol locks in the lead; the lead chains up the alcohol. A combination like this accentuates the action of lead, or produces a hybrid sort of affection, partly alcoholic and partly plumbic, as in the two cases with general convulsions.

My cases, justify, I think, the views I hold, but my contention is further strengthened by a knowledge of the remarkable way in which the kidneys excrete lead. In one of my cases I was uncertain whether the patient was suffering from plumbism or hidden malignant disease. To decide the question, I had, not only the drinking water, but the patient's urine, analysed by Mr. Geo. Jarmain, F.I.C., the borough analyst. His report was that the drinking water contained 0·8 gr. of lead per gallon, the urine 0·28 gr. of lead per gallon. Thus the patient's urine contained such a proportion of lead as would have caused poisoning if present in drinking water. When we bear in mind the albuminuria of inebriety, fluctuating with each increase or diminution in the alcoholic consumption, and disappearing, perhaps, during the abstemious intervals, and when we remember that a great outlet for the excretion of lead is the kidneys, we must allow that there is an *a priori* probability that the combination of lead and alcohol is not likely to be so readily got rid of as either substance singly. The question is important from a practical point of view, and I would suggest in all cases of lead poisoning, but more especially in the rarer cases where the higher nerve centres are affected, that a careful inquiry into the patient's habits be made.

PARALYTIC DEFORMITY OF THE FOOT.

BY F. R. FISHER, F.R.C.S. ENG.,
SENIOR SURGEON, NATIONAL ORTHOPÆDIC HOSPITAL.

(*Continued from p. 114.*)

Talipes Varus.

THE conditions of deformity thus far considered have been such as result from an attack of paralysis, which renders all the flexor muscles of the foot weaker than their opponents. The development of paralytic varus is also contributed to by loss of power of the extensors of the toes, but the tibialis anticus muscle either retains its contractile power, or is weakened to a less degree than are the other anterior muscles of the leg.

Fig. 10 is a condition of varus very closely resembling the state of equinus shown in Fig. 3. In both cases the sole is contracted and the front part of the foot is depressed below the level of the heel, but in the deformity here illustrated the depression is also accompanied by slight inversion. In

FIG. 10.

FIG. 11.

Fig. 11 the contraction of the sole is more marked, and the front of the foot is again inverted, with, however, the still further displacement of being somewhat rotated. The lateral plane of the foot is so far disturbed that, although the outer metatarsal bones are in contact with the ground, those on the inner side are raised, so that only the tips of the great and second toes touch the surface. The heel is also elevated in this example, in which respect, as well as in the contraction of the sole, it is very similar to the case of equinus shown in Fig. 7. The difference in the nature of the deformity produced in the two cases of varus, as compared with the kindred conditions of equinus, arises from the disturbance in the balance of muscular power being not merely a reduction in strength of the flexors below the extensors of the foot, but also from the former group of muscles being themselves unequally affected. The tibialis anticus muscle has retained sufficient power, beyond that possessed by the other flexors, to produce slight inversion in the one case, and some displacement in the same direction, together with a little rotation of the front part of the foot in the other example, the varoid distortion in both cases having occurred at the transverse tarsal joint.

The next stage of paralytic deformity brings us to a case (Fig. 12) presenting all the characteristics of well-defined talipes varus. The feature which at once draws attention is the degree to which the foot has become rotated; the rotation has taken place to some extent at the ankle-joint, and further deviation of the same kind has occurred at the

FIG. 12.

FIG. 12*a*.

transverse tarsal joint. Although the rotation of the foot is so marked a feature, it will be seen that a considerable amount of inversion of the foot is also present. The precise nature of the distortion is more readily studied by examining Fig. 12*a*, which shows the plantar surface of the same foot. The subject stands upon the anterior portion of the

outer border of the foot, and the inner border is turned directly upwards, no portion of the normal treading surface being in contact with the ground; a sulcus running longitudinally along the front part of the sole shows that the metatarsal bones are abnormally close together, and that the foot in this situation is rather compressed from side to side. The ball of the great toe is prominent and is drawn backwards, causing the sole to be contracted, especially on the inner side; the heel is raised to some extent, so that only that portion of the outer border which is in front of the os calcis touches the surface. On examining again the illustration of the dorsum, it will be noticed that the toes are claw-shaped, and pulled upwards and backwards from the metatarsus in the manner already observed as existing in some conditions of paralytic equinus.

The case above illustrated proves that from an attack of infantile paralysis an amount of distortion may arise presenting all the characteristics of the congenital form of talipes varus. The subject was a child seven years of age, who had been afflicted with infantile paralysis when two years old. Cases of greater severity are met with at a later period of life, but they will differ from this one only in the degree to which the several changes from the normal state have become developed. A foot further advanced in deformity is illustrated in Fig. 13. It possesses all the characteristics of the last case in an aggravated form; the heel is more elevated; the rotation is so much increased that the outer border is turned inwards and upwards and the dorsum placed on the ground; there is more lateral compression of the front of the foot, and the longitudinal sulcus in the sole is better defined. There has been complete paralysis of the extensors of the toes, without recovery of contractile power; the great toe lies upon the two adjoining ones, while the others are crowded together. Fig. 14 is from the cast of an adult foot. We have here again the raised heel, and the condition of double rotation with inversion. The great toe is claw-shaped; the other four toes are extended; but the most marked distortions are the extreme degree of contraction of the sole on the inner border and the prominence of the head of the astragalus on the dorsum of the foot. This case should be compared with the one of equinus in the adult illustrated in Fig. 8. Fig. 15 shows the same foot after treatment.

FIG. 13.

FIG. 14.

FIG. 15.

The conditions of rotation and inversion present in these severe forms of paralytic varus are due to the action of the unaffected tibialis anticus muscle; as in the slighter cases just noticed, the extensors of the toes are much weakened; but in the advanced states of distortion the peronei muscles are also implicated, thus allowing the inverting muscles to drag the foot from its normal position and shape. Once a state of varus is established, its further aggravation is contributed to by the weight of the body bearing upon the twisted foot when used as a basis of support.

The reduction of deformity in a case of advanced paralytic varus must be proceeded with in three stages. First, the inversion of the foot upon the leg must be removed; next, the distortion of the foot itself must be proceeded with; finally, having brought the case to one of simple equinus with elevation of the heel, the usual course of treatment for such a condition is followed. To overcome the inversion of the foot on the leg, the tendon of the tibialis anticus muscle must be divided, and in cases of long standing that of the tibialis posticus; the foot is then brought into position by the use of an outside splint attached by a bandage to the leg and foot. To restore the shape of the foot, the plantar fascia and the abductor pollicis muscle will require division, section of the deeper structures in the sole being also necessary in the adult.

The next condition of paralytic varus results from loss of movement at the ankle-joint, due to "right-angled contraction of the tendo Achillis." The foot illustrated by Fig. 16 apparently possesses all the characteristics of well-defined varus. The heel is elevated; the foot is inverted and rotated, so that the anterior part of the outer border is alone in contact with the ground. Such are the external appearances when the weight of the body is bearing upon the affected limb; but when all pressure is removed (as in Fig. 17, which is from a photograph taken at the same time as that from which Fig. 16 is copied), the condition of varus entirely disappears, and there remains merely a state of flaccid extension with slight contraction of the sole.

FIG. 16.

FIG. 17.

In these cases there is always an extreme degree of paralysis of the extensors of the toes and of the peronei muscles, and all power of elevating the foot is completely lost. The change in position arises from the foot becoming displaced laterally to compensate for the want of flexion; when in walking it is placed upon the ground, it is turned slightly inwards by the action of the inverting muscles, which, although weakened, are sufficiently powerful to overcome the peronei; the weight of the body then bearing upon the foot, as the other limb is advanced it becomes still more inverted and rotated. In consequence of this rotation, with twisting inwards of the heel, the tendo Achillis becomes slightly relaxed, and permits of an amount of flexion which is not obtainable when the astragalus is kept in its proper position between the malleoli. When such a state is allowed to exist until the adult age is reached, the foot becomes folded up and compressed, and the tibialis posticus is secondarily contracted; partial absorption of the internal malleolus also occurs, owing to the friction to which it is subjected, while the external malleolus is unduly prominent. In treating this condition, it is only necessary to follow the course pursued in a case of the combined form of equinus.

Talipes Valgus.

Of paralytic valgus three varieties are met with; the development of two of these is due to the same cause as is the condition of varus last considered—viz., "right-angled contraction of the tendo Achillis." The case of valgus illustrated by Figs. 18 and 19 is of especial interest when compared with that shown in Figs. 16 and 17; like the latter, the drawings are from photographs of the same foot when bearing the weight of the body and when relieved from pressure. Under pressure (Fig. 18) the foot presents an appearance of severe distortion; it is rotated, with its outer

FIG. 18.

FIG. 19.

border raised, and with the inner border depressed; the toes are crowded together, and the foot is everted. Relieved from the weight of the body (Fig. 19), the foot falls to a position of full extension on the leg, and the marked features of the deformity disappear; we have, in fact, a case exactly simulating one of varus as regards the existence and absence of distortion under different conditions. The rotation and eversion of the foot are again a compensating movement for the loss of flexion due to the contracted Achilles tendon; the displacement to the position of valgus is caused by the action of the stronger everting muscles, just as in the other instance a condition of varus arose from the action of the more powerful tibiales muscles. Section of the Achilles tendon is required in order to restore the movement of flexion, and occasionally it may be necessary also to divide a few contracted bands of the plantar fascia.

The second variety of valgus is the condition of distortion which most commonly results from slight shortening of the tendo Achillis. Fig. 20 is an example of the condition which closely resembles in appearance a case of "splay-foot," or spurious valgus. In such cases the paralytic attack has not been of a severe nature, and has merely caused slight weakness of the anterior muscles, which have been overpowered by the unaffected extensors, the latter remaining permanently contracted. The formation of flat-foot under the circumstances is due to the arch of the foot becoming broken down at the transverse tarsal joint, where an abnormal degree of mobility is developed to make up for the loss of flexion movement at the ankle. The process of destruction of the arch proceeds in this manner. In the act of walking, the foot of the limb bearing the weight of the body becomes flexed on the leg as the body swings forwards, and is then extended to contribute to the force of propulsion as the other limb is advanced to go through the same movements. When the Achilles tendon is contracted, the foot during progression cannot be flexed to the necessary degree, and an undue amount of pressure is thus thrown upon the foot itself, under the strain of which the transverse tarsal joint becomes weakened. The following diagram will perhaps render the matter more clearly than a verbal description.

FIG. 20.

DIAGRAM 2.

The horizontal lines represent the foot, and the vertical lines the leg, and show the flexion of the foot on the leg in the normal state, and the manner, with some diagrammatic exaggeration, in which the foot is distorted when the back tendon is contracted. If this condition is allowed to continue until an advanced age, the amount of distortion produced is often very great; the foot becomes "boat-shaped," the arch is not merely destroyed, but is actually reversed, the inner border of the sole being convex instead of concave in outline. An extreme example of this deformity is shown in Fig. 21, which is from the photograph of the foot of a lad aged eighteen. Fig. 22[1] is the same foot after treatment. From the close resemblance which this condition of paralytic valgus bears to the more commonly occurring "splay-foot," it is not uncommon to find that an error in diagnosis has been made as to the true nature of a case. It is hardly necessary to direct attention to the importance of detecting the existence of contraction of the tendo Achillis so soon as the form of valgus begins to develop, for obviously the simple methods of treatment, which will so easily restore the arch in a case of spurious valgus, can be of no avail in the paralytic condition. To prevent the further destruction of the arch, section of the tendo Achillis must be had recourse to. In the more advanced stage section of the peronei tendons will also be required, for these muscles become after a time secondarily contracted. The use of valgus pads in the boots, when the subject again is able to use the feet, is desirable for a short time, but the normal arch is soon restored after the cause which contributed to its destruction is removed.

FIG. 21.

FIG. 22.

The third variety of paralytic valgus is illustrated by the example shown in Fig. 23, from which it will be seen that deformity consists simply of eversion of the foot upon the leg, with no distortion of the foot itself. This displacement arises from paralysis of the tibialis anticus and posticus muscles, the foot becoming everted by the peronei muscles, which have not been weakened. The deformity is not often met with, and seldom assumes a severe grade before the age of twelve or fourteen years. A slight amount of eversion of the foot when walking, due to some weakness of the inverting muscles, is, however, not uncommon in younger children, and this again is sometimes confounded with spurious valgus. The paralytic condition may be distinguished by the whole foot being turned outwards at the ankle-joint, causing the inner malleolus to appear abnormally prominent, and also by the absence of any flattening of the arch. The unequal action of the everting and inverting muscles in the early stage can also be detected by causing the subject to fully extend and then flex the foot when lifted off the ground. As the foot is flexed its outer border is lifted up higher than the inner, so that during the movement of flexion the foot becomes somewhat twisted at the ankle-joint. This condition will often pass off without treatment; but it may be necessary that a light instrument should be used attached to the boot to resist the over-action of the peronei muscles until the balance of muscular power is restored. In the more advanced condition section of the peronei tendons is usually required with appropriate mechanical treatment after the operation.

FIG. 23.

DIAGRAM 1.

Note.—Diagram 1 shows the impressions given by a right foot affected with arcuatus, by a normal left foot in the same subject, and by the former after treatment. (This diagram should have appeared, together with Fig. 1, to illustrate the condition of the foot in talipes arcuatus, as described in the first part of this paper.)

(To be concluded.)

[1] The position of the toes in this illustration is worth noticing. The toes are retracted, not from shortening of the tendons, but from a somewhat remarkable muscular effort which is not infrequently made by subjects of paralytic deformity when first using the foot after treatment. The weak limb is always still further reduced in strength by the rest necessitated during treatment of the deformed foot, and the patient, finding how feeble is his basis of support, endeavours, as it were, to grasp the ground with his toes; probably this is reflex and not voluntary muscular contraction.

RIGORS: WHAT THEY MAY INDICATE.

BY W. GILCHRIST BURNIE, M.R.C.S.,
HON. MEDICAL OFFICER, BRADFORD CHILDREN'S HOSPITAL.

IN directing attention to the subject entitled as above, and in giving three illustrative cases, I wish to disclaim any intention of attempting (what, indeed, in a paper of this length would be impossible) a thorough inquiry into the important subject of rigors, my sole object being to point out a few of the diseases that rigors may indicate other than those that are now commonly regarded as following them.

The first case is that of a gentleman in comfortable circumstances, to whom I was called at 5 A.M. on Jan. 20th, 1881, and whom I found with right hemiplegia, receiving from his friends the history of an ordinary apoplectic attack. The patient was a man aged fifty-six, the son of healthy parents, one of whom attained very old age. He was married, with two grown-up healthy children. Up to within the past few years he had always enjoyed good health, but had since suffered from stricture of the œsophagus, in consequence of which he had subsisted chiefly on fluid or semi-fluid food. At the time of his attack he was well nourished and in fairly good health. The hemiplegia, which was accompanied by paralysis of the bladder, pursued an ordinary favourable course, the apparent complete recovery being delayed first by an attack of gout in the toe, and afterwards by a severe attack of cystitis. However, at the end of two months, these two complications, together with all paralysis, had disappeared, and I felt myself justified in giving a favourable prognosis. The patient, however, continued very apathetic, and evinced no desire to get up, although able to do so, and now began to complain of a chilly feeling and of pain in the right hypochondriac region. This state of affairs lasted until March 30th, when I was hastily summoned one day about noon, to find him in a violent rigor, in which the temperature registered the remarkable height of 107° F. Thereupon I asked my father to see the case with me, which he did, and gave it as his opinion that the patient was suffering from malignant disease of the liver. From this time until the patient's death, which occurred on May 14th, he continued to have one or two severe rigors daily, during which his temperature ranged from 104° to 106°, though in the interim it was normal; and, excepting a very gradual increase in weakness, his symptoms underwent no change. A very marked feature of the case was that, with the exception of the slight constant pain in the region of the liver and the distress during the rigor, the patient made no complaint, and was quite collected up to the last. I should mention that on April 1st Dr. Clifford Allbutt saw the case with me, and that, whilst thinking it to be an obscure one, he did not favour the cancer theory, but gave it as his opinion that the rigors were dependent upon the presence of pus within the abdominal cavity.

On May 16th, two days after the patient's death, a necropsy was made. The body was found externally to present no abnormal characteristics. On opening it the cause of death became at once apparent—viz., melanosis. The liver was the organ principally affected, being black throughout, solid, and somewhat enlarged, and on microscopical examination presenting nothing but cancer cells and pigment granules, no liver cells being visible in the specimen observed. The apex of the heart was crowned by a round melanotic mass, the size of a walnut, which was adherent to the pericardium. Spots of melanosis were also found in each kidney, on each of which there was also a cyst, the size of a grape, full of tawny fluid. The spleen was very black and enormously enlarged. No deposits were found in the lungs, although they were distinctly darker than normal. I regret to say that neither the brain nor spinal cord was examined. The œsophageal stricture and pouch, both of which had been diagnosed during life, were discovered. No evidence of disease or cicatrix was met with in the œsophagus, and no pus was found anywhere in the body.

Remarks.—I think it will be granted that the trouble it must always be to a general practitioner to perform a post-mortem examination was in the above case amply repaid. Besides the discovery of the cause of death, there were many interesting features about the case: such as the œsophageal stricture and pouch, as well as the perfectly healthy bladder after severe recent purulent catarrh; and also the fact that the patient, although the victim of such grave and widely-distributed disease, and in spite of his œsophageal stricture, when he died was a well-nourished corpse. I may mention here that during life his heart apparently performed its functions normally, and his urine, on chemical examination, excepting during the cystitis, revealed no departure from health. I regret that no microscopic examination of the urine was made, as possibly, had such been done, melanotic granules might have been discovered, and so led to an exact diagnosis. Sir James Paget, I believe, mentions their presence in the urine as often the only sign of the disease. It is also noteworthy, and to my mind instructive, that the disease chiefly affected the excretory organs—the liver and kidneys; and that there was an entire absence of the disease in the skin.

The second case which I desire to call attention to came under my notice when I was a fourth-year student at St. Bartholomew's Hospital, and made an impression on my mind, not only by its exceptional character, but by the fact that, although from the onset Dr. Andrew, the senior physician to the hospital, had it under his observation together with his then house physician, Dr. West, they were utterly unable, until within a few days of the recovery of the patient from what they regarded as a most grave illness, to venture upon a diagnosis; and I was led to remark to Dr. Andrew that in private practice such a case would be very inconvenient, as the medical man would certainly be expected by the friends of the patients to give a diagnosis. The case was briefly this: A healthy, well-nourished young man, after having suffered for a day from general malaise, for which he had given himself a brisk purge, which had acted well, without, however, making him feel any better, went to bed and had a violent rigor, which was followed by very severe pain in the region of the gall-duct. He was now seen by Dr. West, who administered a morphia draught and expressed an opinion that he might be suffering from the passage of a gall-stone. I have not here space to detail this case in full, but it will suffice for my purpose to state that for a fortnight the patient complained of violent frontal headache and pain in the region of the liver, and was subject nightly to elevations of temperature, accompanied by violent rigors, which were followed by most profuse sweats. Constipation was present throughout. No purgative was given, it being feared that the case might be one of typhoid fever. Until a few days before the patient's recovery, when Dr. Andrew obtained a history of syphilis from him, to which disease he attributed the fever, he felt himself unable to do more than say that the man was suffering from a very severe fever, which threatened to prove fatal. After a few days' treatment by iodide of potassium the patient made a rapid recovery, and for three or four years enjoyed good health, when syphilitic brain mischief appeared, which caused his death. I should here state that before the syphilitic theory was adopted the formation of an abdominal abscess was regarded as the most probable cause of the rigors.

The third and last case to which I mean to refer was that of a primiparous woman whom I attended in labour last July, and who at the end of a fortnight, when I left home for my annual short holiday, was doing well, but had not yet come downstairs. From this time nothing was heard of the patient till the end of three weeks, when I called on her, and found that after I left she had continued to make good progress until a fortnight previously, when she had a rigor. After this she had one or two rigors daily, but did not think it necessary to send for me. On examination, I found her pulse to be 120, and her temperature 104°; she also complained of pain in the right iliac region. I at once ordered her upstairs to bed, poultices to be applied, and quinine administered. In a few days, to my surprise, she had completely recovered; so I again allowed her to go downstairs and lie upon the sofa. At my next visit another rigor had been experienced, and the fever had returned. Again she was removed upstairs, with the result of the symptoms once more leaving her. It was now that I discovered what was, I believe, the cause of the rigors in this case—viz., a direct communication between the scullery sink (which adjoined the living-room) and the sewer. I was led to this discovery by a decided smell of sewer gas in the living-room. The pipe was ordered to be cut off

and the patient removed direct from the bedroom into the country, the result being a rapid and complete recovery.

The features in this case to which I would draw attention are: (1) The advent of the rigors and fever immediately on being exposed to sewer gas, and their remarkable departure when removed to an airy upstairs room comparatively free from it. I tremble to think what would have been the result had the labour taken place in the contaminated downstairs room. (2) The fact that, although the rigors continued during a period of three weeks, no pus was formed, as was evidenced by the complete and rapid recovery of the patient when removed to healthy surroundings.

The chief lesson that the above three cases teach is that we must not look upon the occurrence of repeated rigors in a patient who is not the subject of a malarial fever as of necessity the result of an abscess, or even of a purulent inflammation. A rigor I believe to be simply the danger signal hoisted by nature when a poison enters the blood, or, I ought perhaps rather to say, when a poison has not only entered the blood, but has succeeded in so far making good its lodgment as to alter its character. Thus may we regard the initiatory rigor of the specific fevers, where one rigor is generally all that takes place, because the poison only makes one entrance. Thus, in malaria, probably each rigor represents each time that the malarial poison succeeds in modifying the general blood. This takes place, I believe, when rigors occur during the course of a purulent collection upon each entrance of pus into the general circulation, and the same, no doubt, occurred in the three cases narrated. In the first case, probably a rigor occurred at each fresh inoculation from the primary disease in the liver; in the second, at each syphilitic modification taking place in the blood itself, until checked by the iodide of potassium; and in the third, evidently upon each entrance of sewer gas into the already enfeebled puerperal woman. Of course I do not mean that all rigors are due to blood-poisoning. Some are of nervous origin, and I well remember a case related by Sir James Paget in a clinical lecture, in which persisting rigors were due to an overlooked urethral stricture. The object of this paper, however, has been to try to prove that one must not too exclusively look upon rigors when they occur apart from the specific fevers and malaria as the indications of pus, but must be on the alert for any blood poison.

Bradford.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

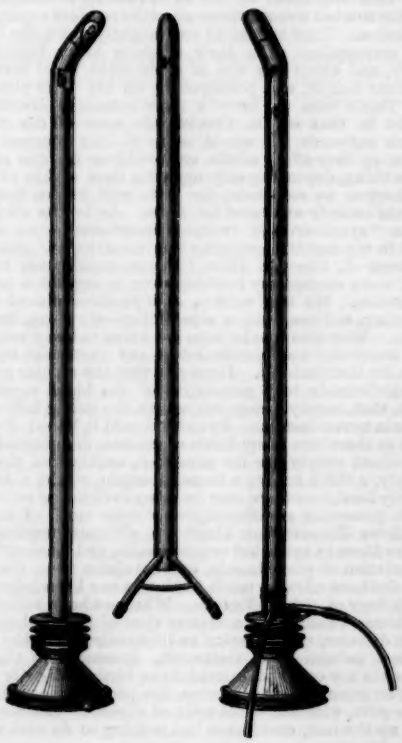
IRRIGATION OF THE BLADDER IN CYSTOSCOPY.

By BERKELEY HILL, M.B., F.R.C.S. ENG.,
PROFESSOR OF CLINICAL SURGERY, UNIVERSITY COLLEGE, AND SURGEON TO THE HOSPITAL.

A CHIEF difficulty attending the inspection of the interior of the bladder in cystitis or with bleeding affections is that of keeping the watery contents transparent. Washing the bladder before the introduction of the cystoscope clears away much of the turbidity; but some purulent mucus remains attached to the inflamed and ulcerated surfaces or entangled in depressions, which floats off bit by bit and obscures the view. Moreover, the bleeding surfaces of a tumour or of an ulcer soon furnish enough blood to render the injected water as hazy as a London fog.

Messrs. Mayer and Meltzer have made, under my direction, a straight double catheter, with a sectional form of one-third of a circle (see accompanying drawing). This lies closely against the cystoscope, and can be introduced along with that instrument into the bladder. The tip of the catheter catches against a little nick at the heel of the bend of the cystoscope, and an elastic band round the two instruments near the handles keeps them in close contact during their passage along the urethra, which need not be at all painful. When the eyes of the catheter are fairly beyond the prostate, a current of solution of boracic acid (or of weak sulpho-carbolate of zinc should bleeding be troublesome) flows from an irrigator held three or four feet above the patient. In a few minutes the turbid urine is washed away, and the contents of the bladder keep perfectly clear as long as the current is maintained, without interfering at all with the movement of the cystoscope.

I find Nitze's own cystoscope, made by Hartwig of Berlin, more convenient for searching the bladder than Leiter's modification, known as the Leiter-Nitze cystoscope. Leiter's is a patented article, and therefore can be bought only of licensed agents. Nitze's instrument has a more suitable beak for turning in the bladder, shorter, and set on to the stem at a better angle. Briefly, it more closely resembles a well-shaped sound than the Leiter-Nitze. Also, the Nitze will revolve without dragging round with it the electric



conductors—an advantage over Leiter's, where the instrument cannot be turned round in the bladder for the purpose of illuminating each portion without pulling the conductors after it. It is claimed for the Leiter-Nitze that a stronger lamp can be used with it than with the Nitze. My experience of the two instruments satisfies me that excellent illumination can be obtained with Nitze's, and its handier shape permits more free movement of it in the bladder. The stronger lamp at the end of the long beak of the Leiter-Nitze sometimes touches the wall of the bladder and causes a painful sense of heat to the patient. Indeed, once my Leiter came in contact with a mass of coagulum, which it shrivelled into a cake that stuck fast to the lamp and shut in the light completely until the instrument was withdrawn and cleaned.

SYMMETRICALLY GROUPED COMEDONES.

By J. A. WETHERELL, M.B.

IN THE LANCET of Oct. 13th last Dr. Thin gives a verbal description of three cases of grouped comedones, all of them in adults, together with a diagram illustrative of one of the cases. He considers that there is a by no means rare class of such. Dr. Radcliffe Crocker, in the issue of Oct. 27th, discusses the subject, and gives two figures. He seems to think that there are two distinct kinds or classes of comedones: one occurring in children, sometimes distributed irregularly—say on the face,—and occasionally in groupings;

and a second and altogether different class affecting adults. Having just casually come across a case somewhat similar to that represented in Fig. 1. of Dr. Crocker's, I have determined to communicate it.

J. B——, aged thirty-seven years, is a hale, hearty man, who enjoys perfect health in every respect. He says he has suffered all his lifetime from the affection, and had made several unsuccessful attempts to cure himself. Immediately beneath each lower eyelid, and extending a little externally to the outer canthus, is a group of comedones, having the shape of an isosceles triangle, the base of which is directed outwards. They have an appearance as if grains of powder had been implanted on the skin, causing a disfigurement similar to what we sometimes see as the result of a gunpowder explosion. They are raised very slightly above the level of the surrounding skin, their summits being tipped with black, and about the size of a pin-point, all of them of a uniform height, and consequently on the same plane. In Dr. Thin's case we have a more extensive distribution, whilst in that of Dr. Crocker the apex of the triangle points outwards. I would suggest that grouped comedones as they affect adults and children are one and the same thing, depending only upon the time of life at which we happen to see them, for it is well known they may remain entirely unaltered for years. As to the etiology of these "symmetrically grouped comedones"—and observe that in my case the grouping is symmetry itself, exact and uniform—I, like Dr. Thin, have no explanation to offer, and must confess my inability even to suggest a probable causation. We find eczema and psoriasis almost always affecting, not one hand or side of the body alone, but both alike. Why this should be so we know not any more than we know why they should select any particular region of skin for their habitat. It may be that the regular grouping is attributable to a peculiarity of the blood supply of a part, that supply being subject to the ruling influence of certain nerve domains. But why should it be so? Perhaps, just as there are many kinds of eczema, one depending on the blood supply for its causation, another on the nerve supply, a third having a bacterial origin, whilst a fourth is purely local,—so there may be many varieties of comedones, each possessing a different *fons et origo mali*. I fear that until we discover more about the ultimate termination of nerve fibres in epithelial or other cells, and more about the circulation of ptomaines in, and expulsion from, the blood, we shall not advance much further in our knowledge of the pathology of either affection. When we have solved these problems we shall get a clearer view of the etiology of all skin diseases, and a better understanding as to the physiological indications of treatment. Inasmuch as the comedones in my case had existed from birth, evidently having had an intra-uterine existence, the proverbial and ineffaceable gout, with the whole train of digestive troubles bringing up the rear, could have had nothing to do with them.

Barnsley.

ON THE DILATATION OF THE PUPIL IN LOCOMOTOR ATAXY.

By ANGEL MONEY, M.D.

I HAVE several times observed a dilatation of the pupil in cases of locomotor ataxy in which the pupil did not contract to light. This dilatation only occurs, according to my observations, when the light employed in the search for the Argyll-Robertson symptom is intense, such a light as that used in the ophthalmoscope room. My impression has been that it is the intense light and heat acting upon the conjunctiva—i.e., fifth nerve—which is the cause of the dilatation of the pupil, just as is supposed to happen in stimulation of the skin of the neck by pinching or by the faradaic brush. But the dilatation due to intense light and heat is very small compared with that which usually obtains in health on irritating the skin. In the case of locomotor ataxy in which this dilatation of the pupil has been witnessed, pinching the skin of the neck on the side on which dilatation occurred from exposure to strong light and heat only caused a slight dilatation of the pupil. The pupils contracted when the eyeballs were convergent. It would be interesting to know whether the great heat of the lamp had as much to do with the production of the phenomenon as the intense light. In the cases in which I have observed this dilatation the pupils have not been very small.

Harley-street, W.

COCAINE IN CANCER OF THE BREAST.

By J. F. SOMERVILLE, L.F.P.S.G., L.A.H.D., L.M.

MRS. B—— was operated on about two years ago by a prominent surgeon in London for cancer, the entire left breast being removed. However, twelve months after the operation the disease reappeared, and developed so considerably that the same surgeon was again consulted and pronounced the case hopeless. Three months ago the usual intense pain which accompanies such cases set in, and it became simply a question of alleviating suffering. The usual remedies having after a fair trial proved ineffectual, I tried a cocaine ointment (1 in 20). It had a marvellous effect; the pain was subdued almost immediately and continually kept under by its use. It had been used for two months, there having been no occasion during that time even to increase the strength. The patient expired on Monday, Dec. 24th, without the least suffering. I mention this, not knowing whether it has before been used in such cases.

Swanage.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Procemium.

HOSPITAL FOR SICK CHILDREN, GREAT ORMOND-STREET.

A FIFTH CASE OF INTUSSUSCEPTION SUCCESSFULLY TREATED BY INFLATION.

(Under the care of Dr. CHEADLE.)

THE treatment of cases of intussusception is a subject on which we have often dwelt in the columns of THE LANCET, and, as from time to time we receive further communications demonstrating the effect of treatment, we give them prominence, the subject being one of great importance. Brinton collected a series of 500 cases fatal from some form of intestinal obstruction, and of these no less than 215 were due to invagination of the intestine. This is a very large proportion. Cases have been cured by means of the passing of gum-elastic bougies up the rectum,[1] and copious injections of warm water have proved successful. Maydieu of Argent[2] used a mixture of No. 5 shot and olive oil, seven ounces of the former to four ounces of the latter, and quoted twelve cases of supposed examples of the disease thus treated. He has not found many imitators. Taliaferro records the case of a prisoner who was cured by the use of effervescing powders placed in the rectum, but died of parotid bubo some weeks later; his gaoler acted as medical adviser. Iced injections have also been tried. The method which is now usually employed, when these cases come under the observation of the physician, is that of inflation, first recommended by Gorham in 1838.[3] This, when combined with external manipulation, and the use of chloroform in children, often succeeds; it is not invariably successful, even if employed at an early stage of the disease; this must be remembered, and the patient vigilantly watched. Dr. Cheadle, in his remarks on a former case,[4] says, "The success of inflation in the cure of intussusception depends largely, no doubt, upon its early employment. Higginson's syringe proved of most use." Fagge[5] says on this subject: "It has now been frequently employed, and sometimes with the result of curing the disease. More often, perhaps, its success has been partial. The tumour has been reduced in size, or it has changed its position, returning towards the seat which it had occupied at an earlier period." Too great care cannot be taken in its employment; trials should not be too prolonged nor violent in-

[1] Fagge, vol. ii., p. 413. [2] THE LANCET, vol. i. 1870, p. 737.
[3] Guy's Hospital Reports, vol. iii., p. 345.
[4] THE LANCET, Mirror of Hospital Practice, vol. i. 1888, p. 321.
[5] Op. cit

jection practised. Should, however, the mischief return after reduction by this means, inflation may be again employed, and with success. Of this we have published some interesting examples. Dr. Elliott[6] repeated it many times in the case of a child aged eight months, where there was a most obstinate tendency to recurrence of the condition, and succeeded in curing his patient. Dr. Chaffey[7] succeeded in reducing the intussusception by injections five times in a boy aged three, but exhaustion proved fatal. Mr. Bryant[8] gives warning as to the dangers which may follow the employment of inflation: "Bowels have been ruptured by its use." Mr. Knaggs[9] mentions more than one case where this perforation of the bowel took place and proved the cause of death. Reasons for the failure of this and other treatment in intussusception sometimes arise from the fact that no importance is attached by parents to the earlier symptoms, or the gravity of the disease is not recognised by the medical attendant. There is also a feeling amongst some members of the profession against operative measures. They prefer to wait for gangrene of the intussusception, but this is now recognised as a rare and generally fatal occurrence in young children. For the notes of the following case we are indebted to Mr. Priestley, registrar.

W. A——, a boy aged fourteen months, was admitted on Dec. 3rd, 1888, with the following history. On Nov. 27th (six days previously) the child attracted the attention of his mother by screaming. He was found very pale, with his legs drawn up on the abdomen, and apparently in great pain. He was given a dose of castor oil, which was vomited immediately; a second dose was also returned, and the vomiting continued, though it was not noticed to be stercoraceous. On Nov. 28th he passed some blood by the bowel; and later, blood mixed with slime. The passage of blood and slime had recurred daily, and there had been no natural motion. The mother ascribed the child's condition to some plum-cake which he had eaten the day before he was taken ill.

On admission the child appeared very ill and collapsed, the pulse was small and compressible, and the eyes were sunken. The abdomen looked a trifle full, but there was no tenderness on pressure. A well-defined sausage-shaped tumour could be felt on the left side of the abdomen, extending from the hypochondrium to the iliac fossa. On introducing the finger into the rectum, the invaginated portion of gut could just be reached, and a dimple felt on its posterior aspect. On withdrawing the finger, it was found to be covered with slime. Dr. Cheadle, having been communicated with, sent word that inflation was to be employed. This was immediately carried out by Mr. Batchelor, the house physician, after the administration of chloroform. An ordinary Higginson's syringe was used, and the bowel was inflated with air until the abdomen became decidedly tense. After waiting a minute or so, the air was allowed to escape, and on examination the tumour could still be felt in the left hypochondrium. After repeating the inflation, only an ill-defined mass could be made out to the right of the umbilicus; and after a third inflation no tumour could be felt in any part of the abdomen. The child was ordered one minim of liquor opii sedativus every three hours. He became easier after the operation, the pulse improved, and two liquid motions were passed within two hours after the inflation, unaccompanied by blood. He vomited once, immediately before being put under chloroform, but had not done so since.

In somewhat over a week since his admission the little patient seemed perfectly well; the bowels had acted three times naturally, and the temperature was normal.

Remarks.—There are four successful cases of intussusception treated by inflation at the Children's Hospital recorded in THE LANCET of October, 1886, and February, 1888. Three of these were under the care of Dr. Cheadle, and one under that of Dr. Barlow. One case had existed for a week; the other three were recent when subjected to treatment. Besides these, there have been three fatal cases treated during last year at the hospital; the first had existed five days, the second seven days, and the third four days, before the children were brought for treatment. The last case was complicated with peritonitis; and in the second fatal case referred to the gut was hopelessly gangrenous. In the three fatal cases inflation failed to reduce the intussusception. The importance of an early diagnosis in these cases cannot be too strongly insisted upon, but the record of the above case shows that, even when an intussusception has existed for a week, the prospect of a cure is not hopeless.

[6] THE LANCET, vol. i. 1887, p. 67.
[7] Ibid., Mirror of Hospital Practice, vol. ii. 1888, p. 17.
[8] Surgery, vol. i., p. 716.
[9] THE LANCET, vol. ii. 1887, p. 1124.

ADDENBROOKE'S HOSPITAL, CAMBRIDGE.

A CASE OF INTUSSUSCEPTION OF SEVEN WEEKS' DURATION TREATED BY ABDOMINAL SECTION; RECOVERY; REMARKS.

(Under the care of Mr. CARVER.)

ALTHOUGH it has been strongly urged for a long time that operative measures should be resorted to on the failure of inflation or injection of fluids, there are few cases on record of successful laparotomy for intussusception. Mr. Barker[1] collected a series of sixty-three cases of laparotomy for the relief of intussusception and gives the result. In thirty-four, where the invagination was relieved (twenty-three of which were children), five recovered; and out of eleven adults seven recovered. In the children[2] the ages varied from six months to four years; the duration of symptoms before operation from seventeen hours to a month. Of the successful cases in the adult,[3] aged from twenty to fifty, the symptoms varied from some hours to several months. To this list we are able to add others. Mr. Workman[4] records the case of a child aged eight months and a half, who recovered after laparotomy on the failure of inflation combined with massage. Here the symptoms had existed for only twenty-four hours. The case by Mr. Carver recorded below was mentioned at the time it was brought forward,[5] but is considered well worth a fuller notice. The only successful case known where the intussusception was resected was by Vasilieff:[6] a man aged twenty-five; laparotomy was performed, the invaginated bowel (seventeen inches of ileum) excised, and an artificial anus established, which ultimately closed after resection of the gut. Mr. Barker's tables include the published cases of unsuccessful operations; some have not been recorded; thus the result of the operation appears in a most unfavourable light. We have advised early operation before, and there is little doubt that this must be strongly urged on the profession. Habershon[7] says: "With early operation laparotomy for intussusception ought to be one of the most successful of abdominal operations." Operation should not be delayed beyond the second day." Hutchinson[8] says: "Chances of successful treatment by bougie &c. are exceedingly small excepting in quite recent cases, and if the surgeon does not succeed by them promptly, it is not likely that he will succeed at all." He recommends early resort to operation in young children where the prognosis is very bad, scarcely any recovering, excepting a few in whom injection treatment is immediately successful. We must refer our readers to the more recent text-books for a full consideration of this important subject. For the following notes we are indebted to Mr. A. Street.

Ernest H——, aged two years and nine months, a fair, pale, thin boy, and very weak, was admitted on Jan. 20th, 1887. Three months before admission he had been troubled with worms, and had passed two large-sized round ones. Seven weeks before admission he had eaten a supper consisting of new cake and raw carrot, and the next morning was seized with violent pain over the right iliac region and vomiting, which lasted all day. His parents gave him castor oil, thinking the symptoms due to his supper, but this only caused more pain and increased the sickness. He continued in this state for three days, when he brought up a large round worm, and his bowels were opened for the first time after the seizure, but only to pass a thin yellowish motion with a little blood. He then had some worm powders administered, but with no effect. He continued in this state for another week, during which time his bowels were opened several times, but only very little fluid motion with mucus and blood was passed. The pain then subsided, and he had two soft motions, and was able to retain a little beef-tea if he did not take more than a sip at a time.

[1] THE LANCET, vol. ii. 1888, p. 262.
[2] Operators: Hutchinson, 1871; Marsh, 1875; Sands, 1877; Godlee, 1881; Barker, 1887.
[3] Operators: Nuck, 1692; Fuchsius, 1824; Wilson, 1831; Howse, 1874; Bellamy. 1879; Kleberg, 1879; Burckhardt, 1883.
[4] THE LANCET, vol. ii. 1888, p. 888.
[5] Ibid., vol. i. 1887, p. 929.
[6] Brit. Med. Jour., vol. ii. 1888, p. 137.
[7] Diseases of the Digestive System, p. 574.
[8] Med. Chir. Trans., vol. lvii.

He continued in this improved state for about a fortnight, when the pain and vomiting returned more severely than before. Now, twenty-five days before admission, the vomiting was noticed to be stercoraceous, and the bowels, acting frequently, brought forth only blood and mucus. Five days after this, a swelling was noticed in the left iliac region, which became tense and more painful when there was any straining. Poultices and fomentations were applied to it. A fortnight before admission a protrusion of the bowel was noticed at the anus, since which time he had vomited everything he took within a few minutes, and passed per anum only blood and mucus. So seven weeks had elapsed from the first indication of the disease until admission: the first two being marked by vomiting of everything, and the bowels passing only a very small quantity of fæces; the next two by an intermission, when he could retain a little nourishment and passed watery motions; the next three, from when the swelling was noticed, he vomited everything, and passed only blood and mucus. For some short time before admission he had been seen by Dr. White of Caxton, who had administered small doses of opium. On admission he was extremely emaciated; the abdomen was slightly and uniformly distended, except at the upper part of the left iliac region, where there was a soft, well-defined swelling, slightly curved to the right, about three inches and a half long and an inch and a half broad. It was fairly movable, was resonant on percussion, very tender on pressure, and the most painful spot of the whole abdomen. When he strained either at defecation or whilst vomiting it became tenser and larger. On examining per rectum, the anus was found dilated, and just presenting was a protrusion of mucous membrane of a dusky-red colour, round which the finger could be swept completely as far as it could be introduced. No opening or dimple could be made out in it. The tongue was a little furred. Pulse 120, very weak and small; respiration 24.

A consultation of the surgical staff was held, and it was decided to proceed to abdominal section, and attempt reduction from within the abdomen. A soft catheter having been passed, the patient was anæsthetised with ether, and Mr. Carver operated, using the spray and other antiseptic precautions. An incision three inches long was made in the middle line, commencing immediately below the umbilicus, and the peritoneum opened to a corresponding extent. The swelling was easily found, but with difficulty brought to sight, and before it could be fully exposed the incision was increased for an inch upwards. It was then found that the intussusception was of the ilio-cæcal variety. The outermost layer was of a dark, reddish-brown colour, but the peritoneum was shining and seemed fairly healthy. The work of reduction was then commenced, but for three or four minutes no progress was made, although some force was exerted, until by passing a finger into the rectum, and by manipulation and traction at the junction of the returning and receiving parts, a few inches were released. The rest was easy until the cæcum had to be reduced, when very considerable difficulty was experienced, which was not overcome without a small laceration of the peritoneum: this was at once stitched up. The walls of the cæcum were very œdematous. There was no evidence of any abnormal substance in the gut. The peritoneal cavity was well douched with weak carbolic water, and the wound closed with catgut sutures. The dressing was the green protective and iodoform wool. The operation lasted fifty minutes, during which time a drachm of brandy was injected hypodermically, as the pulse got very weak indeed.

The after-treatment was the same as is generally carried out after abdominal section, but for at least a fortnight the child was allowed no solid food. His progress was remarkably satisfactory (his temperature once went up to 100°), and he recovered strength and put on flesh very rapidly. He was not allowed to get up until three weeks after the operation, and when he was discharged he was a fairly chubby boy, his bowels acting regularly, with no pain or uneasiness.

Brief notes of this case were published in the Transactions of the Cambridge Medical Society, before which Mr. Carver read the paper.

Remarks by Mr. CARVER.—The above case was interesting both as regards the length of time that had elapsed since the first onset of symptoms, and the result of the treatment that was followed. The patient was in a very grave condition when first seen by me, and it was evident from the state of extreme exhaustion in which he was that whatever it might be considered necessary to do should be done quickly. To have had recourse to enemata or inflation of the bowel would have been not only useless, but positively harmful, for either must have produced increased exhaustion, and robbed us of the little strength needed for any further operation. There was no evidence of general peritonitis; local peritonitis was more to be expected, gluing the received and receiving parts of the invaginated bowel together, or sphacelus of the included portion. Although the circumstances of the case were so grave, it was decided that laparotomy should be performed as the only chance of saving the child's life. This was accordingly done, without any accident happening beyond the giving way of the peritoneum to a limited extent. The lesson taught by the foregoing is that in similar cases time should not be wasted in having recourse to doubtful measures, but that laparotomy should be at once performed, for it might so happen that, if the parts were still free and could be reduced, a similar result would be obtained. If, however, the received portion were adherent to the receiving, and reduction could not be effected, the section would scarcely increase the risk; or, if the bowel were gangrenous, resection would hold out the greatest chance of recovery.

Medical Societies.

ROYAL MEDICAL & CHIRURGICAL SOCIETY.

Back-knee, Knock-knee, Bow-knee, and other Deformities resulting from Deficiency of Growth at the Epiphysial Lines.—Laryngeal Tuberculosis simulating Abductor Paralysis.

AN ordinary meeting of this Society was held on Jan. 22nd, the President, Sir Edward Sieveking, being in the chair.

A paper on Back-knee and other similar deformities was communicated by Professor Humphry, who was unfortunately unable to be present. A case and specimen of what the author called "back-knee" was exhibited, in which the deformity was seen to result from a sharp bend backward near the upper end of the tibia, due, as it appeared, to a deficiency in growth at the fore part of the epiphysial line. "Knock-knee," it was stated, depended in most cases not, as commonly said, upon overgrowth of the internal condyle of the femur—overgrowth in a bone or part of a bone being a rare occurrence—but upon deficiency of growth of the outer or condyloid part of the femur at the epiphysial line; and a specimen illustrative of this was shown. The deformity was in some cases exaggerated by rickety flexure in the femur, or tibia, or both, and might be entirely due to such flexure. "Bow-knee" might be also due to similar flexures in an opposite direction, but was often dependent, partly or wholly, upon deficient growth at the inner part of the epiphysial line of the tibia or of the femur. Specimens of deformity at the upper end of the humerus, attributable to the like cause, were shown, and the deformity in "lateral curvature of the spine" was also referred, in part at least, to the interference of growth at the upper and lower epiphysial lines of the bodies of the vertebræ. These several deformities the author regarded as being of a rickety nature; the growth, including ossification as a part of that growth, which took place almost entirely on the shaft side of the epiphysial lines, being, as was well known, commonly defective in rickets, and productive of that familiar bulging of these lines consequent on their inability to resist the pressure to which they were subject. The epiphysial lines of the femur and tibia near the knee, especially that of the femur, being those in which growth took place to a greater extent than in any other part of the body, were the most likely to manifest imperfection; and forasmuch as growth in them was continued to a later period than in other parts of the skeleton the imperfection often manifested itself here at a later period than in other parts, sometimes not till the other evidences of rickets had passed away, and not unfrequently in persons in whom no other signs of rickets had been observed.—Mr. C. B. LOCKWOOD showed a specimen taken from a man, aged forty-six, who was in the dissecting room at St. Bartholomew's Hospital. It was a good example of knock-knee, and he found it difficult to decide whether the internal condyle was too large or the external too small. He thought, however, that the vertical measurement of the

inner condyle was greater than it should be, and the inner tuberosity of the tibia was higher than the outer. The line of tibial epiphysis was straight, and so it was in a specimen shown by Mr. Power. The curve in the tibia was compensatory and the fibula was synostosed to it; the femur showed the usual sygmoid curve, and the neck of the bone on the left side formed at least a right angle with the shaft. At the insertion of the internal lateral ligament there were bony outgrowths, but they were not in the line of the epiphysis. Several similar outgrowths were present down the posterior aspect of the shaft of the fibula. The internal and external lateral ligaments of the knee-joint were strong and well developed, and the ligaments and arches of the foot were perfect.—Mr. ADAMS agreed with the general conclusions of Professor Humphry regarding this class of cases. The general character of rickets was deficiency in length of bone, and the condition was produced by dietetic and not constitutional causes. In back-knee change undoubtedly occurred at the ends of the bones, but a yielding of the shafts also occurred. Bow-leg, he thought, depended more on a yielding of the shaft than of the epiphyses, though the latter shared in the process. Ligamentous yielding was the rule in knock-knee.—Mr. EDMUND OWEN thought it was a matter of uncertainty whether the bones or ligaments yielded. If the bones yielded, it was in the direction of the normal curves, but when the ligaments stretched strange deformities resulted; in a child the first thing noticed was flat-foot, then the internal lateral ligament of the knee gave way, and the internal condyle continued to grow, the external remaining stationary. Professor Humphry stated that many cases of genu-extrorsum were due to bowing of the femur and tibia; he himself thought they were nearly all due to this, and that condylar changes were extremely rare. He showed as a living specimen, a remarkable case of genu-extrorsum, due either to excessive external or defective internal condylar growth.—Mr. PYE inquired if genu-extrorsum and bandy-leg were the same or different affections. Bandy-leg, he thought, was due either to a rickety curve of the tibia or to coincident curves of the femur and tibia, whereas genu-extrorsum was a term he would confine to the inverse condition to genu-valgum; an angular curve of the limb taking place at the knee-joint, the femur and tibia remaining straight.—Mr. R. W. PARKER believed there was an increase in the length of the internal condyle, that the first step in the affection was flat-foot, and that the growth of the inner condyle was brought about by the additional pressure on it consequent on the altered axis of the limb. He knew of no condition in which extra work produced atrophy, and had seen several cases where the internal condyle was obviously too long.—Mr. WILLETT could not think that the extra growth was due to irritation from pressure, or one would not get a lessened measurement along the concavity in lateral spinal curvature. He thought that after knock-knee was once established pressure along the inner side of the limb would be less. The internal condyle grew because it failed to receive the normal pressure from the inner tuberosity of the tibia.—Mr. NOBLE SMITH said that if the bones were soft and the ligaments lax, the deformity would depend upon the direction of the body weight. Pressure on the surface of the outer condyle retarded growth, but relaxation of ligaments would permit it. He had seen cases regain a proper position of limb after correction of deformities of the foot, and cases also undoubtedly sometimes occurred from weakness alone, there being no trace of rickets.—Mr. KEETLEY deprecated any attempt to explain the causes of all these affections in too cut and dried a way, though he thought the majority were due to alteration in the bones; indeed, he did not think a case of lateral spinal curvature could be found in which there was not osseous deformity. This deformity could not in all cases be due to defect of growth, for some of them showing advanced changes did not begin till after childhood was passed. The great majority of cases of genu-extrorsum depended upon alterations in the tibia below the epiphysial line, and some few instances were due to alteration in the femur. He knew of no treatment of lateral spinal curvature which did an atom of good. Fixation in rigid apparatus, gymnastic and other modes of treatment were equally valueless.—Dr. JOSEPH GRIFFITHS said that Professor Humphry in his paper made reference only to those lateral curves which developed during childhood.

Dr. PERCY KIDD read a paper on a Peculiar Obstructive Form of Laryngeal Tuberculosis which simulated Bilateral Abductor Paralysis. This paper was based upon six cases in which symptoms of laryngeal obstruction were found to be due to persistent fixation of the vocal cords in the position of phonation, simulating bilateral paralysis of the crico-arytenoidei postici muscles. In all these cases the patients were the subjects of phthisis, and tubercular lesions were present in the larynx, but in no instance was there sufficient swelling of the soft parts to occasion stenosis, which was amply accounted for by the condition of the "rima glottidis." In three cases a necropsy was obtained. The pathogenesis of this affection was discussed, and reference was made to the work of others. The conclusion was drawn that stenosis of the glottis from fixation of the vocal cords in the median situation, simulating bilateral abductor palsy, might occur in tubercular disease of the larynx as the result of at least three causes: (1) Dense tubercular infiltration around the arytenoid cartilages, secondarily involving the perichondrium and leading to false ankylosis of the crico-arytenoid joints; (2) ulceration and morbid adhesion of the altered vocal cords; (3) suppurative crico-arytenoid arthritis. The clinical points raised by the narration of the cases were then considered, and attention was drawn to the question of tracheotomy, the conclusion arrived at being that tracheotomy or some other surgical measure was indispensable when this condition of the glottis was detected.—Dr. DE HAVILLAND HALL had recently observed a case in which the cords were fixed in the cadaveric position and producing much stridor. The proposal that the cords should be removed had not been well received. He thought thyrotomy was a good operation in some cases, if the parts affected could be removed through the incision.—Dr. DOUGLAS POWELL thought these cases excessively rare. He regarded them as due to fixation of the cords by infiltration, but in one of his three cases there was arthritis of the crico-arytenoid joint as well. These cases should be separated from those of mere tubercular overgrowth. An objection to intubation would be the difficulty of expectoration through it.—Mr. H. H. TAYLOR considered that a grave objection to thyrotomy was the difficulty of healing afterwards, and probably necrosis of cartilage would follow.—Dr. KIDD, in reply, had noticed cases in which the cords were fixed in the cadaveric position, but these did not require active treatment. It was extremely difficult to introduce a tube, as the tissues were fixed and firm from infiltration. In one case he was able to demonstrate that over-action of the adductors was not the initial lesion.

HUNTERIAN SOCIETY.

THE meeting of the Society on Dec. 12th last was devoted to the exhibition of pathological specimens, Mr. R. Clement Lucas, President, in the chair.

Dr. FOWLER showed a case with Symptoms of Raynaud's Disease. The affection began four months ago, with pallor of the third and fourth left digits, followed late by black blotches on the dorsum of both hands, which broke, and formed black gangrenous patches. The patient, a sailor, was otherwise in excellent health.

The PRESIDENT introduced a specimen of Epithelioma of the Upper Jaw which he had recently removed from a patient brought before the Society on Nov. 14th by Dr. Hingston Fox.

Dr. G. A. CARPENTER showed sections of a small Polypoid Growth removed from the Umbilical Cicatrix of a boy aged three. The stroma consisted chiefly of fibrous tissue with many vessels, and there were a few bundles of unstriated muscular fibres. All round the periphery were tubular glands lined with columnar epithelium exactly resembling Lieberkuhn's follicles. At one part of the section was to be seen a small mass of myxomatous tissue. The surface of the polypus between the orifices of the glands was covered with columnar epithelium. Dr. Carpenter said that he was inclined to consider the polypus a remnant of the vitello-intestinal duct. A section of rectal polypus was shown for comparison.

Dr. CARPENTER also exhibited three specimens of Congenital Heart Disease. 1. A heart with pervious foramen ovale. 2. A heart with perforate septum ventriculorum and stenosis of the pulmonary artery, the orifice of which was guarded by a valve of only two cusps. The aorta was enlarged, and the organ as a whole hypertrophied. 3. A heart with pervious foramen ovale; questionable narrowing of the pulmonary artery; ulcerative

endocarditis of mitral and aortic valves of recent date, with granulations invading the pervious foramen.

Dr. HINGSTON FOX showed a specimen of Ulceration of the Stomach from a patient aged fifty, of intemperate habits, who died from perineal abscesses and septicæmia. Excepting profuse hæmatemesis sixteen days before death, there was no history whatever of gastric trouble. There was thickening of mucous membrane along the lesser curvature, with a group of eight or nine ulcers of various sizes and depths, one nearly perforating the coats. Although acute gastric ulcers have been recorded in pyæmia, it was thought, from the characters, that these were chronic, and their existence a long time without symptoms was of some interest.

Dr. HINGSTON FOX also showed from the same case a series of Ante-mortem Coagula removed from the cavities of the heart and great vessels. The pulmonary artery and veins were represented by trees of ramifying coagulum extending into the finer vessels. The clots were pale, firm, fibrous-looking, non-adherent, and softened at one spot only. Dr. Fox believed they had been formed during the slow process of dying.

Dr. G. N. PITT showed two specimens of Compression Necrosis. 1. Ulcer on mucous membrane on the posterior surface of the cricoid cartilage, due to pressure against the vertebræ, from a patient with chronic pyæmia, who was kept in a warm bath at a temperature of 100°, and slung up. His head was persistently retracted, and the pharynx necrosed, as a result of the steady pressure. A similar result occurred in a case of cerebro-spinal meningitis with retraction of the neck. 2. Ulcers on the adjacent surfaces of the anterior points of the mucous membrane over the arytenoid cartilages in a case of enterica, taken from a patient aged twenty. The attack was a very severe one, and he was semi-comatose the last three days of his life. The ulcers were superficial, and the cartilage not bare. They are said to occur in about 10 per cent. of the fatal cases. They are usually undiagnosed, as the patient's voice is so feeble that any hoarseness or aphonia is not noticed. Some authorities think that the ulceration is a specific one associated with typhoid, but in a very severe case, where there are two superficial ulcerations on points persistently in contact with one another, Dr. Pitt inclined to the view that the pressure may be the cause.

Dr. PITT also introduced a specimen of Extreme Syphilitic Destruction of the Laryngx and Trachea, from a young woman, aged twenty-three, with extensive syphilitic destruction of soft palate and fauces. During life no more than the destruction of the epiglottis and swelling of the aryteno-epiglottidean folds were to be made out with the laryngoscope. The true and false vocal cords and the mucous membrane of the trachea were very severely ulcerated and destroyed.

Dr. HORROCKS showed a specimen from a Fœtus carefully dissected. During life the fœtus had caused great difficulty in parturition, which finally ended in the death of the mother by rupture of the uterus.

Mr. JOHN POLAND exhibited a specimen of Pyæmic Epiphysitis of the Femur, with necrosis of the head of the bone, from a girl aged fourteen. Excision of the hip had been performed on account of suppuration and destruction of the hip-joint. The disease commenced ten weeks before in an alveolar abscess of the lower jaw; this was followed by pyæmic symptoms and inflammation of the right ankle and knee joints, and later on the left knee and hip became affected. There was thickening about the lower as well as the upper end of the femur. All the joints, except the left hip, soon regained their normal state.

EPIDEMIOLOGICAL SOCIETY OF LONDON.

The Prevention of Phthisis.

A MEETING of the above Society was held on Wednesday, Jan. 9th, Dr. Thorne Thorne, President, in the chair.

Dr. J. EDWARD SQUIRE read a paper on the Prevention of Phthisis. If phthisis can be proved, said the author, to depend in any degree upon preventable causes—i.e., upon conditions within the reach of human control—the large annual mortality from this disease marks it for the special attention of sanitarians. Phthisis takes its place with bronchitis as one of the most frequent causes of death in this country, and its importance is the more marked, as it carries off its victims during adolescence and adult life, when the working powers should be most active. A review of the conditions on which this disease depends shows that some of the most essential come well within the scope of preventive medicine. The discovery of the bacillus tuberculosis allows us to place phthisis in close relation to the class of infectious diseases, towards the control of which preventive medicine has already done so much; and experiments have abundantly proved that tubercular disease can be communicated from affected animals to the healthy. That consumption can be communicated from person to person has long been a matter of popular belief, and cases were referred to which seem to prove that such is actually the fact. The dependence of tuberculosis upon the infective bacillus has been shown by numerous experiments. Phthisis, then, depends primarily upon the reception into the body of an infective particle or micro-organism; but a lowered vitality of the tissues places them in a more favourable condition for the development of the bacillus, and thus constitutes in the individual a predisposition to the disease. The modes in which the bacillus may gain entrance into the body were thus stated: (1) By inoculation through a cut or scratch; (2) by means of the genito-urinary mucous membrane; (3) by the product of conception, and by direct hereditary transmission; (4) by the mucous membrane of the alimentary canal; (5) by the mucous membrane of the respiratory tract, and by the air-cells of the lungs. The possibility of infection through the alimentary tract assumes importance from the prevalence of tuberculosis in animals which are used as food, and from the experimental proof of the infectiousness of the milk of tuberculous cows. The present state of knowledge on the subject points very strongly to the necessity for careful inspection of cattle kept for dairy purposes, and for precautions in using the milk, and possibly also the flesh, of diseased animals. But, as infection through the respiratory system is more potent and probably more frequent than by any other means, and as the risk of infection is intensified by close contact and by the crowding together of sick and healthy, the necessity for free ventilation is apparent, and becomes more so when the predisposing causes are considered. The predisposing causes were considered under the following headings: 1. Hereditary predisposition. 2. Influence of air and sunlight. 3. Age and sex. 4. Effect of certain occupations. 5. Influence of locality and habitation, which includes the consideration of climate and temperature, altitude, nature of the soil, density of population, and the condition of dwelling-houses, both as regards their construction and the overcrowding of the inmates. 6. Influence of certain diseases, local and general. In-door and sedentary occupations, as well as those in which much dust is inhaled, are shown to influence largely the prevalence of phthisis. Much of this amongst the persons following such occupations is preventable. Here, again, the basis of all preventable measures is found in efficient ventilation. The home workers—i.e., amongst tailors—are more difficult to deal with than the factory hands; but public work-rooms, in which men could find convenience for their work, might lessen the evils of the present state of things. With regard to climate, its influence on the causation of phthisis is probably infinitesimal as compared with the effect of density of population. Overcrowding is of two kinds: the aggregation of buildings on a confined area, with insufficient open space around and between houses, and the crowding together of persons within the houses. Bye-laws should be enforced regulating the width of streets, the amount of open space around houses, the minimum height of rooms and size of windows; and efficient inspection of new houses should be carried out before they are allowed to be occupied. Tenement houses might be licensed to hold a certain number of inmates, and be liable to inspection. As many diseases which produce a general debility thereby predispose to tuberculosis, general sanitary and hygienic measures framed for the control of these tend to diminish the amount of phthisis in a community, and seeing that insufficiency of food, of fresh air, and of exercise, continued anxiety and mental depression, and dissipation must be included amongst the predisposing causes, the philanthropist may assist the sanitarian in the fight against this widespread disease. The fundamental principles which must form the basis of any successful attempts to diminish the prevalence of phthisis are (1) to provide a sufficiency of fresh air in and around dwellings and work places, and (2) to endeavour to improve the resisting power of the individual by physical training during the period of growth

and development, and by exercise and recreation alternating with the work of maturer age. As the effects of phthisis in the individual are not confined to a single generation, but are handed down by hereditary transmission from parent to child, any cause which tends to increase tubercular disease amongst the adult members of a population, must be regarded as tending to produce a progressive deterioration of race. It is therefore to the interest of the community to allow no time to be lost in commencing a systematic attack against the preventable causes of phthisis.

In the discussion which followed, the President, Dr. Michael Taylor, Dr. Lawson, Dr. James, Mr. Cresswell, and Mr. Shirley Murphy took part.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

Epithelioma in the Horse.—Tubercular Ulceration of the Intestine.—Diseased Heart.—Congenital Malformation in a Mummy.—Ulceration of Ileum.

A MEETING of the Pathological Section was held on Nov. 30th.

Dr. R. GLASGOW PATTESON made some remarks on Epithelioma in the Horse. He said that epithelioma was an exceedingly rare disease among the domesticated animals, while among wild animals either living in confinement or in their natural state it was almost unknown. Mr. Bland Sutton had met with only two examples. One was in a Japanese wolf; the growth occupied the mucous membrane between the gums and the tongue. The second example occurred in the anus of a dog. Mr. M'Fadyean, demonstrator of Pathology in the Royal Veterinary College, Edinburgh, had not met with a case, and both he and Mr. Sutton agreed in the observation that tumours from the penis of the horse were generally fibromatous or papillomatous. Dr. Patteson showed specimens he had obtained from a horse ten years old. The tumour was situated on the penis, and originated in a part the epithelium of which normally contained pigment, yet in no portion of the neoplasm could pigmented cells be found.—Professor BENNETT said that it had been long familiar to pathologists that carcinoma, in the form of scirrhus, occurred in the lower animals. These cases were important as tending to disprove an absurd theory that cancer in man was a descendant of syphilis.

Dr. BEWLEY exhibited, for Dr. James Little, a case of Tubercular Ulceration of the Intestine. The patient from whom the intestine had been removed suffered for two years from phthisis, and for the last three months of his life from uncontrollable diarrhœa. The small intestine contained seventy-nine large typical tubercular ulcers, and the large intestine about thirty. The lungs showed the ordinary phthisical changes. Dr. Little called attention to the fact that the man, in spite of such lesions, was very fat.

Dr. MACSWINEY exhibited and gave an account of a case of Diseased Heart in a woman aged seventy years, who was brought dead to Jervis-street Hospital. At the necropsy, on opening the pericardium, which was healthy, the heart was found to be large, very hard, and having some adipose tissue deposited upon its right upper surface. All its cavities were quite empty; both ventricles were contracted. The right auricle and ventricle were, in all particulars, normal. The left auricle was of normal size, but its walls were hypertrophied. The auriculo-ventricular ring was hard, corrugated, greatly stenosed, admitting the tip of one finger. The left ventricle was greatly hypertrophied, and of small dimension in the cavity. The aortic valves were entirely consolidated and converted into a dense, hard, calcified mass. A small aperture existed in their centre, admitting barely a goosequill; this hole allowed the passage of water from the aorta into the ventricle. There were no external appearances on the body, which was wasted, pointing to the cause of death—neither œdema, dropsy, nor cutaneous venous congestion. There was also absence of any atheromatous patches upon the thoracic aorta.

Professor BENNETT submitted a case of Congenital Malformation in a Mummy. The bones were those of an Egyptian mummy that was many years ago placed in Marshe's Library. There was an extraordinary contrast between the two humeri. The left was perfectly normal, and was apparently that of a full-sized man. The other humerus was very small and stunted, and had at the elbow end this remarkable peculiarity, that it was wider from condyle to condyle than the bone on the sound side, while the distance between the margins of the articular surfaces was a trifle less. The upper extremity of the stunted humerus articulated with a joint which showed traces of chronic rheumatic arthritis. The joint was evidently one in which motion had taken place. He called this a congenital malformation, because he did not know any other explanation of the conditions.—Dr. FRAZER said there were also found a few pieces of the original mummy case, with the gilding, ornaments, and bandaging, sufficient to show what it was. He was particularly struck by the peculiar perforation at the lower end of the mummy humerus. He found the same thing in the bones disinterred some years ago at Donnybrook, in connexion with a Danish massacre that was known to have occurred there.—Dr. LENTAIGNE said it seemed to him that the deformity might have resulted from epiphysary fracture, which often arrested the development of the bone.

Dr. BEWLEY showed the Ileum of a patient who had died of hæmorrhage in typhoid fever. The case had been a long one, consisting of a primary attack and two relapses. The ulcers were few in number, eight or ten, and (with the exception of two or three in the cæcum) were confined to the lowest three feet of the ileum. Their surface was smooth, and appeared to be in process of healing, but in the centre of several of them was a fresh ulcer surrounded by thickened and overhanging edges.

Reviews and Notices of Books.

A Text-book of Human Physiology, including Histology, with special reference to the requirements of Practical Medicine. By Dr. L. LANDOIS, of Greifswald. Translated from the Sixth German Edition, with additions, by WILLIAM STIRLING, M.D. Third Edition. Pp. 920. 692 Woodcuts. London: Charles Griffin and Co. 1888.

BY the adoption of rather smaller though still very distinct type, a fuller page, diminished "leading," and by "running on"—that is, by making lines continuous which were previously broken,—Dr. Stirling has managed to compress the whole of the matter contained in the two volumes of the former edition into a single volume of apparently much smaller size, and has yet found room to insert nearly 200 new illustrations, which we consider to be a rather remarkable feat. The book as a whole is the most complete *résumé* of all the facts in physiology in the language. Less philosophical in plan and execution than the "Text-book of Physiology" of Michæl Foster, it is much richer in detail, and it has the advantage of presenting the main facts in histology which it is important for the student to know, and has at the close of each subject a section dealing with its medical aspect. Thus, in the single subject of the blood, the following points are noticed which might be read with benefit by every clinical clerk and house physician: the clinical method of determining the specific gravity of the blood and of determining its corpuscular richness; the influence of hæmorrhages, of menstruation, and of fevers on the number of the corpuscles; the condition of the blood in chlorosis and in pernicious anæmia; the effects of poisoning with coal gas and carbonic oxide gas; the mode of performing transfusion; and a consideration of polyæmia (should it not be polyhæmia?) and its forms; of mellehæmia and lipæmia; and lastly, of anæmia. Considerable additions have been made, too numerous to mention, in the form of illustrations and of short sentences and paragraphs, in the accounts of the different systems of organs—those, for example, on the nervous apparatus, including the recent observations of Ferrier, Schäfer, Horsley, and others; whilst numerous illustrations of the reproductive organs have been introduced; and we may remark that the woodcuts, as a rule, show up very much better on the thinner and smoother paper which characterises this edition. Those given in connexion with the nervous system include a full-page

illustration of the vagus, another of the structure of the cortex of the occipital lobe of the brain, and another of the frontal convolution.

Clinical Lectures on Diseases of the Urinary Organs. Delivered at University College Hospital by Sir HENRY THOMPSON, Surgeon Extraordinary to His Majesty the King of the Belgians, Consulting Surgeon and Emeritus Professor of Clinical Surgery to University College Hospital, &c. Eighth Edition. London: J. & A. Churchill. 1888.

IT is twenty years since Sir Henry Thompson published the first edition of these clinical lectures. The small volume of twelve lectures has gradually grown to three or four times the size, and now comprises thirty-two lectures. This is an increase of six upon the last edition. In almost every part the volume before us bears signs of the author's revision; but the pleasant, conversational, yet forceful style of these lectures has been in no measure sacrificed, and we doubt not that this edition will be as popular as its predecessors with students and practitioners. Much of the new matter in the volume has been already published, such as the chapter on the Dietetic Treatment of Patients excreting Uric Acid in excess, and that on the Supra-pubic Operation. The chief thing that is new in this volume is the author's opinion on the electric cystoscope. He speaks of it in guarded language, but is evidently prepared to recognise its value in certain difficult cases of vesical disease. It is a regrettable omission that in the book Sir Henry Thompson to a large extent ignores his contemporaries.

A Correlation Theory of Chemical Action and Affinity. By THOMAS WRIGHT HALL, M.D. London: Remington and Co. 1888.

IN the preface to this wonderful work we are told that "the living Theorist in Chemistry at best succeeds only in planting himself or his Theory on the Pillory of Science." If this means that the theory must stand the test of scientific criticism, the author need be under no apprehension, and may sleep peacefully in his elevation, since no living being could possibly criticise his book. We have done our best, and read page after page until, like Teufelsdröckh, we felt the approach of the "frightfullest species of Magnetic Sleep." The reader is, from beginning to end, confronted with a kind of scientific nightmare, which defies every attempt at analysis, and of which it is impossible to make any kind of sense, while the victim is lured on through chapter after chapter by attractive headings and sonorous phrases. A few extracts will give some idea of the character and style of the book. If any of our readers can understand them, they will leave the unfortunate reviewer far behind.

"From the forms with which this earth teems, therefore, we abstract, while theorising on Chemistry, the Quintessential Form—the forms of the Cosmical Solidity, Liquidity, Gaseity, and their Pitches or the allotropy-like changes," &c. (page 11). "In this Chemistry I study a most Common Thing—the Fire that Science has least regarded, namely, the Dayshine and the Nightshine" (page 39). The nightshine seems to be starlight. "In a thundery landscape there is a Plus force and form superabounding in the Sky, which the Land, the Land Waters and the Flora lack, attract, and can appropriate, eagerly and greedily; and there is a Minus force and form superabounding in the thundery landscape's Lands," &c. (page 69). "Chapter XXXVI. Action between Oxygen and Metal.—Oxygen is pergaseous, very expanded and cosmically heated, but liquefiable and solidifiable by Local Cold" (page 211). "For example, combine or juxtapose molecularly Nitrogen with *plenty* of Carbon; which carbon is to the low-pitched spectral force what Nitrogen is to the high-pitched, which is to heaviness what Nitrogen is to lightness ..... which is to cosmical cooledness what Nitrogen is to heatedness," &c. (page 294).

We may conclude with the following superb passage, in which the force of alliteration is brought to bear with overwhelming effect:—"In the packed pulsating pressure of the Plenum the rubbed expanded Atomy and the rubbed contracted Atomy, the Positive and Negative Atomy will be pushed together or will seem to attract each other, amid the Ether of the Plenum. A dilated bulkier Atomy in a pulsating packed Plenum naturally dovetails into the hollow room made by the contraction of a negative neighbour Atomy." One sympathises with the rubbed and contracted negative neighbour Atomy, and does not grudge him his capital letter, but consolation comes with the thought that a worse thing may befal, for if two contracted or negative Atomies take to pulsating against one another, they do so at a fearful risk; they "pulsate against the order of pressures and of form and of pulsation of the Plenum, and, meeting each other, will not flow or oscillate like the generality, but will shock or repel each other" (p. 353), with possible injury to their moral characters.

Adopting our author's style, we cannot but fear that the Pulsations of the Plenum in his Pericranium have produced profound Perturbations in his Physical Perceptions; or, in other words, that the good Doctor, whose home, it appears, is in Bahia, has been overworking his brain.

New Inventions.

GREEN'S HYPODERMIC CASES.

MESSRS. CHARLES GREEN & CO., of Tower Chambers, London, have forwarded to us one of their hypodermic cases, containing a syringe, needles, and a bottle for holding the hypodermic solution. The syringe (figured below) is neat and handy; it has the doses very clearly marked in black upon an opal glass ground, with a central space of clear glass which enables the solution and the piston to be easily seen. The different parts of the syringe are united by fine screws, without the employment of any cement, so that the instrument can readily be taken to pieces for cleaning, and when screwed together sufficiently firmly, rubber washers prevent any leakage. The bottle to

contain the hypodermic solution is fitted with a screw-capped nickel-plated top. An opening through this is, under ordinary conditions, closed with a small wedge-shaped plug, which holds its position firmly when the bottle is inverted, and yet is readily removed when the solution is required. The opening is exactly fitted by the nozzle of the hypodermic syringe. The arrangement of the metallic plug is ingenious, and obviates the difficulty so often encountered in attempting to remove a glass stopper around which crystallisation has taken place. The hypodermic cases are supplied at reasonable prices, and are constructed with one or more bottles.

NEW WIRE ADJUSTER, FOR USE WITH THE ÉCRASEUR.

HAVING experienced the usual difficulty met with while endeavouring to adjust the wire loop of the écraseur round the base of an intra-uterine polypus, I was led to design an instrument which I consider will be found on trial a valuable aid in such cases. The illustration represents the wire-holder, which will retain its grasp of the loop while lifted

over the polypus and placed where required by the operator, while at the same time free play is allowed for tightening the wire by the écraseur. The clip on the handles can be released and the wire set free at will, and the operation

concluded without fear of the wire slipping off the polypus. The simplicity of the idea will, I fancy, recommend it. The makers are Messrs. Arnold and Sons, London.

ALEXANDER DUKE, F.K.Q.C.P.I.

TORSION BRAIDED WIRE PILLOWS AND MATTRESSES.

THESE appliances appear calculated to be of value, especially to invalids confined to bed, for whom comfort is of great importance. The obvious advantages of these mattresses and pillows are, of course, chiefly their high elasticity and porosity, by which easy repose may be secured without undue heat. They are stated to be very durable, a quality which has been obtained by submission of the steel wire to great pressure. To prevent rust, which would seem *a priori* to be an objection to the use of metal for such a purpose, the wire is said to be thickly coated with tin. As they must necessarily be more cleanly than cushions stuffed with hair or woollen material, on the score of health alone they are worthy of patronage. The patentees are the American Braided Wire Company, 64, Church-street, Shoreditch, E.

A NEW DRAIN PIPE.

AN ingenious contrivance has been invented by Messrs. Scott and Co. for the prevention of leakage from sewers and house drains. At one end of each length of pipe is a spigot which dovetails into a socket in the next pipe, the whole being sealed by liquid cement, which is run in through apertures leading to the socket. The joint is said to be absolutely watertight, and the drains to be readily laid. So firmly are the pipes wedged together that they remain intact and bridge over any sinking of the ground that may occur, thus largely replacing iron pipes. If experience should show that these joints stand the test of time, they will give increased facilities for the sanitary engineer to protect the health of his clients.

BRITISH NURSES' ASSOCIATION.

A MEETING of the General Council was held at the Medical Society's rooms, Chandos-street, Cavendish-square, W., Mr. Savory, the President of the Royal College of Surgeons of England, in the chair. There were present: Sir Dyce Duckworth, Drs. Priestley, Buzzard, Fardon, Kingston Fowler, Heywood Smith, Acland, Gell, Schofield, Messrs. Owen and Pick, and other well-known medical men; Mrs. Bedford Fenwick, and many matrons and nurses from London and provincial hospitals.

The minutes of the previous meeting were read by Miss Wood, the secretary, and confirmed by the chairman.

Dr. Bedford Fenwick, hon. secretary, read the annual report of the Executive Committee, which stated that the British Nurses' Association has proved in every way to be most successful, both in its initiation and in its progress during the past eleven months. "Founded upon Dec. 7th, 1887, the following two months were devoted to conferences with leading members of the medical profession, with the result that on Feb. 13th, 1888, a great public meeting was held in St. George's Hall, which determined that the Association should be definitely organised upon bases which these conferences had decided to be most advisable. Nearly 100 members were immediately enrolled, and by Feb. 24th the numbers had risen to 391. Upon that day the first general meeting of members took place at the Middlesex Hospital. The bye-laws, which had been drawn up chiefly by a committee of well-known medical men and matrons of hospitals, were unanimously adopted, and the General Council and Executive Committee and honorary officers appointed. From that date the progress of the Association has been rapid beyond all expectation, and even beyond all precedent. To-day the Executive Committee has the pleasure to report that 2203 members have been enrolled. But beyond this, permission has been granted for the formation of branches in the Australasian colonies and in South Africa, the members of which will probably swell the numbers of the Association by several hundreds. Financially, the Association has been also most successful. The total receipts for the past year have been £736 5*s.* 6*d.*, while the whole expenses, including the necessarily heavy preliminary charges for public and private meetings, printing and postage, altogether only amount to £216 1*s.* 8*d.*, leaving a balance to the credit of the Association of more than £520. Out of this the committee has invested £350 18*s.*—the exact amount received from life subscriptions and donations. The fact, however, that the expenses have been so small and the balance so large is due to all the work having till lately been performed gratuitously. But the time has now arrived when the Association can well afford to pay for offices of its own and for the necessary clerical labour. The committee therefore has decided to take suitable rooms as soon as possible, and the assistance of Miss Catherine Jane Wood has been obtained for the Association as its secretary. Many meetings have been held to consider the provisions to be embodied in the Royal Charter, which it is the first and well-known object of the Association to obtain. The matter is of such vast importance that the Executive Committee strongly feels it should not be too hurriedly discussed and decided upon. A conversazione was held at the Grosvenor Gallery on Dec. 7th, the first anniversary of the foundation of the Association, at which over 1000 persons were present. A series of six meetings has also been arranged, the first of which took place on Nov. 23rd, and was attended by more than 100 members and visitors. Meetings have furthermore been held in many of the chief towns in the kingdom in favour of the objects of the Association. For the future this council has authorised the foundation of a benevolent fund, to assist such members as may be in need of temporary pecuniary assistance, but the benefits of which will probably be further extended in due time; the foundation of a gold medal of merit for nurses, to be called the 'Princess Helena Medal'; the establishment of convalescent homes and holiday houses in the country, or at the seaside, for the benefit of members. How much or how little of these schemes—each requiring great organisation and large sums of money—the Executive Committee may be able to accomplish in this coming year cannot be foretold, nor what progress may be made with the first and greatest scheme of all—the acquirement of the Royal Charter. But in view of the unexampled success which has hitherto attended the efforts of the Association, the committee are encouraged to hope for much more in this coming year. The committee cannot close this report without acknowledging most gratefully the assistance it has derived from the advice and support of her Royal Highness the President, the value of which to the Association has been quite incalculable."

The report was unanimously adopted, and Dr. Priestley in graceful terms proposed a vote of thanks to Mr. Savory for taking the chair. This was seconded by Dr. Fardon, and carried by acclamation. Mr. Savory replied, and the meeting then concluded.

BIRMINGHAM AND MIDLAND COUNTIES ORTHOPÆDIC AND SPINAL HOSPITAL.—The Queen, having generously contributed the sum of fifty guineas towards the funds, has further commanded that for the future the hospital shall be called "The Royal Orthopædic and Spinal Hospital, Birmingham.'

THE LANCET.

LONDON: SATURDAY, JANUARY 26, 1889.

IT was a happy thought to ventilate the question of Chronic Alcoholism in the cool atmosphere of the Pathological Society. This question in any other Society is apt to prove a burning one. But, as Sir JAMES PAGET felicitously said, the debate on the results of intemperance had been a most temperate one. For all that, it was a very serious one, and should be diligently studied by every practitioner. It constitutes for the time being the best statement that can be seen of the actual, material, and palpable consequences of using alcohol to excess. For the real value of the discussion was in its contributions to the pathology of alcoholism. One or two speakers dealt with purely statistical statements and arguments. These are not without interest, but they were somewhat out of place in the Pathological Society. It is only fair to remember, too, in reviewing the discussion, that the speakers generally, like Dr. PAYNE, who opened the debate, had in view the use of alcohol in an excessive quantity or in its concentrated forms. Dr. GEORGE HARLEY, indeed, said, on the strength of life insurance office statistics, that the habitual use of alcohol in a much smaller amount than was usually supposed materially shortened life, and that the average life of teetotallers was considerably longer than the average life of the moderate drinker. But he did not enforce this statement with any proofs from his own somewhat special experience. And undoubtedly the majority of the speakers had in their mind, when describing structural and palpable lesions produced by alcohol, the case of those who drink largely. We wish in no degree to lessen the gravity of this discussion, or the warning that it gives to all concerned that alcohol is as veritable a poison, if injudiciously used, as lead or arsenic. Our own constant remarks on this subject for years past, in harmony with that of all the leaders in medicine, have been in favour of extreme moderation in the use of alcohol in diet, and extreme precision and caution in the prescription of it as a remedy. We have denounced all casual drinking of alcohol as fraught with danger to health. We feel, however, that temperance must be observed even in the denunciation of intemperance, and that the medical profession will make its best contribution to the cause of temperance by arguing the question on strictly medical lines. The discussion on which we comment is, on the whole, an admirable instalment of this contribution. Allowing that the destruction of organs there described was chiefly the result of what we may call coarse intemperance, it still remains a grave warning of the physical havoc in store for those who use alcohol recklessly. As Dr. SHARKEY indicated in the debate, the power of resistance to alcohol varies greatly in different individuals. One man may be the subject of cirrhosis or alcoholic paralysis at forty from the effects of quantities of alcohol that would permit another man to live unscathed to sixty or eighty. Every practitioner knows men, and even ladies, who indulge in what Dr. FINLAY would call "Bacchanalian bouts of drinking," but who contrive to live long without paying the penalty in diseased nerves or liver. The explanation is that they are persons of remarkable constitution, and have tissues with extraordinary powers of resistance. If ordinary people imitate them, and think to do so with impunity, they will undoubtedly find themselves mistaken.

We may indicate the principal points raised in the discussion, but we fear that many of them are yet far from being settled. The definition, however, given to them by this discussion will go some way towards hastening the settlement of them. Dr. PAYNE, in his able opening and closing of the debate, insisted clearly on stating his belief that the ordinary pathological conception of cirrhosis needs reconsideration. He demurred to regarding it as a mere inflammation of the interstitial stroma of the liver set up by alcohol introduced through the portal vein, and producing great quantities of new fibrous tissue, which by pressure destroys the hepatic cells. He insisted that the destruction of cells and hyperplastic inflammation of connective tissue take place concurrently, and in this view was supported by Dr. LIONEL BEALE, who held that the essence of cirrhosis was atrophy of cells, and not inflammation of connective tissue. Dr. DICKINSON stoutly maintained that the overgrowth of fibrous tissue is the essence of cirrhosis; and Dr. SHARKEY showed specimens of apparently healthy liver cells side by side with masses of newly formed connective tissue even in advanced cases of cirrhosis. We must leave this debateable question in pathology with an inclination to the ordinary view, at the same time fully recognising the force of Dr. PAYNE'S objections. We are especially interested incidentally in his suggestion that the liver cells seen in such connexion with newly formed fibrous tissue may be newly formed cells, and in his hopeful view of the formation of new cells and new bile ducts; in other words, in a restoration of tissue in a diseased liver, supported, as he says, by clinical experience of cases of recovery from grave degrees of hepatic disease.

Not the least interesting part of the debate was that having reference to alcoholic paralysis and other forms of nervous disease produced by alcohol. We will not dwell on the special pathology of alcoholic neuritis, or on the order of changes in the nerves. What is eminently worthy of the attention of practitioners in this connexion is the frequency of tubercular disease in cases of alcoholic paralysis. In fact, the association of chronic alcoholism in all forms and tuberculosis was brought out by almost every speaker, including Dr. PAYNE, who said truly that the inaccurate impression that habits of alcoholic excess were in any way antagonistic to tubercular disease must be regarded as swept away. Dr. DICKINSON'S investigations into the comparatively much greater frequency of tuberculosis in publicans and others whose occupations or habits expose them to the evil of chronic alcoholism were the first to open the eyes of the profession to the fallacy that alcohol antagonises tubercle. Many eminent medical men have felt with Dr. DICKINSON that, as alcohol does so much harm, it surely must do some good. But, so far, the good that it does or the evil that it prevents has not been made very manifest. They need more definition. Dr. ISAMBARD OWEN says the statistics of the Collective Investigation Committee showed that the consumption of alcoholic liquors appeared to check

malignant disease. This statement should now be tested very rigidly. Malignant disease is said to be on the increase. We have seen the demolition of the belief that alcohol is a preventive of tubercle; it would be some set off against the mischief it works if it could be shown seriously to antagonise cancer. We suspend our judgment, and meantime have to thank the Pathological Society for a valuable contribution to the pathology of alcoholism.

THE essential characteristic of a scientific frame of mind is a super-sensitiveness with regard to truth. Every suggestion that is offered in explanation of phenomena which are imperfectly understood is received with cautious reserve at its birth. This characteristic is liable to be mistaken for uncertainty or for prejudice, but in reality it is solely the outward sign of a just appreciation of the numerous sources of fallacy, which so often tend to render the most brilliant speculations worthless, when examined rigidly and coldly by the ideal standard of truth.

A definition of truth which shall be universally applicable and satisfying is indeed hard to formulate. Truth, estimated in its highest form, must present a passive unchangeable aspect from every point of view. It must not waver into explanatory exceptions when tested by new conditions; it must remain fixed under every variation of surrounding circumstances. In short, truth is that which is. It is symbolic of eternity. It has always existed, even though unrecognised, and in its ideal character it will always endure. With this conception of truth, this belief in its unalterable nature, the agnostic attitude towards scientific advances with which the medical profession is so often charged, resolves itself into a mere hesitation against the reception and propagation of possible error. It is not a thoughtless, reckless scepticism, but rather an attitude of caution until every new statement has been thoroughly investigated. When gauging the probability of the truth of any suggested explanation, it is held to be scientifically unsound to welcome it merely because someone of undoubted honesty of purpose has expressed his entire belief in it. This may often influence us largely; it undoubtedly often does so; but there is always the possibility of mental bias to be reckoned with, as well as the possibility of unconscious delusion. No single sense is to be implicitly trusted. A preconceived idea may lead to the recognition of one property, while others of greater importance are overlooked. Pushed to its logical conclusion, this ideal standard of truth demands more proof than can ever be obtained, and, for working purposes, its severity must be relaxed. The ideal may remain in our minds, but in practice it is found convenient for its place to be largely occupied by what might be called, for want of a better term, provisional truths. In this category would be included all those statements which we accept, partly on account of the number of facts which appear to support them, and partly because they have been made by careful, conscientious observers after thorough consideration and elimination of all probable sources of error. The limitations of human powers and of individual training prevent the personal investigation of every assertion. Any attempt in this direction would be likely to be crowned with failure; opinions would be quoted as truths, and opinions formed from the same data are proverbially liable to difference. Without long apprenticeship to the labour of investigation, the stern interrogation of fact is apt to be lightly undertaken, and too much reliance placed in those wonderful flashes of inspiration which excite admiration in a poet, but are out of place in a laboratory. Imperfect education fosters delusion; indeed delusions are most rife with the dangerous condition termed a "little knowledge," when the whole is liable to be rashly assumed from the part, when a false appearance of truth may be mistaken for explanation, when the result of an erroneous observation unchecked by scientific training, may be hastily considered to amount to demonstration.

In his article upon Truth and Delusion in a contemporary Dr. LAUDER BRUNTON does not seek the ideal standard we have above indicated, but looks rather for "the germ of truth," generally to be discovered in widespread popular beliefs. Instead of searching for the shining light which might be taken as symbolical of truth, he considers that truth generally has more than one side, and that contradictory opinions held with equal tenacity by two different people may indicate that each of them grasps part of the truth, which has not been fully revealed to either. This many-sidedness of truth he dwells upon until he is ready to recognise the presence of the merest gleam hidden in many popular beliefs, which are ordinarily treated with ridicule. In despair of finding the whole truth and nothing but the truth, he is content to trace the germ from which many popular delusions have started, and he urges that increase of knowledge should render us receptive as well as sceptical, and ready to submit to examination those ideas which at first sight appear wholly untrue. This necessity he shows in an entertaining way by reference to innumerable popular delusions. Sir KENELM DIGBY'S well-known sympathetic treatment of wounds, by applying remedies to the instruments which have produced them, is touched upon lightly, and the underlying truth of its success explained by tracing it through its intermediate stages. Admitting the frequent difficulty of distinguishing between coincidence and consequence, he thinks that many "omens" may have been founded upon real physical conditions; acts, unimportant in themselves, such as stumbling on leaving home in the morning, being important as indicating the condition of the nervous system; if the individual believes in omens, it is perfectly possible that a casual trip may lead to depression of spirits, which may in turn produce failure in any serious enterprise subsequently undertaken. In dealing with popular delusions, Dr. LAUDER BRUNTON adopts the Darwinian method, and by thus tracing them from their source he is able in many interesting examples to prove his contention of the probable universality of truth, according to the standard or knowledge at the time immediately preceding that at which the delusion started upon its downward course. Interesting as the progress of truth must always be, it is no less interesting to pause from time to time, as Dr. LAUDER BRUNTON has done, and to endeavour to follow the stages by which beliefs, originating in truth, have gradually become distorted with age, until their primary source is scarcely to be credited. Ideal truth, as a perfect sphere of light, must to a large extent remain

unapproachable as a poetic conception, but when truth is seen only in part (as it is by the human mind) the pure white light is apt to be split up into prismatic hues; each tint is but a part of the whole, which is unattainable.

THE continued prevalence of diphtheria in the town of Aylesbury has given occasion for an official report by Mr. JOHN SPEAR,[1] in which a large number of questions concerning the etiology and natural history of that disease are discussed in a thoughtful manner. Diphtheria had been practically absent from Aylesbury for nearly three years, when it became epidemic in October, 1885, the disease continuing into 1886; and it is noted that the first appearance of this disease was in a row of cottages into which a stray case had been imported some months before, and that its subsequent spread was almost exclusively amongst the children of certain day schools. The average annual death-rate from diphtheria in Aylesbury during the five years 1880–84 was equal to 0·17 per 1000 on an estimated population of 8000; but in the three years and four months following it rose to 2·2, or thirteen times the previous rate, and in 1887 it was as high as 3·2. A new invasion set in about April, 1887, and was maintained until the corresponding month of 1888. Between July, 1886, and April, 1887, no death from diphtheria was registered in the town, and, so far as could be learned, there only occurred three non-fatal cases, and these were in widely different localities.

In considering the cause of the 1887–88 epidemic, Mr. SPEAR shows that there was a complete absence of any history of importation, and that the disease was not brought about by infection due to milk, to water, or as the result of any known ailments in the lower animals. But, as has so often happened before, there had been during the interval between the two outbreaks a prevalence of so-called "simple sore-throat"; and even when this prevalence abated on the occurrence of the well-marked diphtheria epidemic, there still remained occasional cases, which were quite indistinguishable from the so-called simple attacks which had prevailed during what is regarded as the non-epidemic period. Mr. SPEAR is not, however, inclined to look upon this sequence of events as one in which a potential and gradually developing specificity attached to an apparently benign disease; and this to some extent because, in unequivocal diphtheria, virulence is a quality subject to seasonal variation, and because the marked manifestation of the disease was, as in the former Aylesbury epidemic, most observed after a prevalence of some months of the recognised disease; the main fatality and virulence occurring, as it has often done before, about the month of November. But at the same time he observes, as regards the "sore-throat" attacks which intervened between the two epidemics, that catarrhal rhinitis with some offensive discharge was common during this period; that, although definite paralyses were absent, general debility of some duration frequently followed; and that, according to one local observer who had seen some 200 cases, the attacks were generally multiple—a fact which convinced him of their infectiousness. These are points which would lead many observers to regard the attacks as suspiciously akin to diphtheria itself. That a connecting link of throat lesions did unite these two outbreaks in point of time is unquestioned, but, after weighing the evidence, Mr. SPEAR feels that he is unable to form a definite opinion as to the precise value which attaches to these apparently simple and non-fatal attacks as regards the 1887–88 epidemic. Little is said in the report concerning the incidence of these attacks, and the negative character assigned to them may be in part due to lack of information.

Coming next to consider the question of the influence of personal infection, the report speaks of the epidemic as strongly indicative of some slowly progressive mischief such as would be supplied by the multiplication of foci of such infection; and yet there remained no less than 30 per cent. of the attacks as to which no history of any sort could be obtained bearing on previous exposure. And further, the fact that 57 per cent. of the attacks were single cases, and this in the face of but trivial precautionary measures against spread, hardly bears out the notion of the operation of any very special infectivity. From April, 1887, to the end of the same month in 1888, there were 91 family invasions, which involved 157 attacks and 32 deaths. Of the attacks, 66 per cent. of the initial seizures were in children of the school age—namely, four to fourteen years,—and 56 per cent. of the secondary attacks occurred at the same period of life. But, apart from a somewhat special incidence of the disease in two schools during the month of November, school influence does not appear to have been marked; indeed, the school attacks could be largely explained by the fact that the sufferers chanced to be drawn from the more infected localities in the town—an experience quite different from that which was observed in the 1885–86 epidemic.

The outbreak in November, 1888, was a considerable one. It involved 24 families, 32 attacks, and 10 deaths; and it can hardly be set down to any special school influence, because the three schools then affected were simultaneously attacked; opportunities for spread had also for some months past existed in the schools; and there was, further, a corresponding increase of the disease in children not attending school. There was also at this time a marked increase of fatality. Exaggerated activity of the contagious principle of diphtheria in the fourth quarter of the year is by no means unusual, but the circumstances of the exacerbation in Aylesbury have led Mr. SPEAR to look upon the occurrence, in that town at least, as due in part to certain local conditions. He hence discusses the localisation of the disease at some length, and points out, among other circumstances, that, both as regards the apparent commencement of the 1887–88 epidemic and the cases of recrudescence, the distribution of the disease in both prevalences tended to localise itself in much the same places. Persons in houses attacked in 1885–86 suffered during the later epidemic by more than 60 per cent. than the rest of the inhabitants of infected streets, and by somewhat more than twice the extent of their fellow townspeople generally. How far this may be due to unequal distribution of children over the town is not explained, but investigation of the sanitary state of the specially infected districts naturally followed, and one thing became prominent above others. It is, that whilst Aylesbury has spent large sums

[1] Eyre and Spottiswoode, East Harding-street, E.C.; Adam and Charles Black, Edinburgh; Hodges, Figgis, and Co., Dublin.

in connexion with the disposal of its sewage, it has left within its area a large extent of sewers so foul that they irretrievably pollute even the more modern sewers into which they enter; and, speaking generally of the diphtheria, it is stated that it was found to coexist with a condition of sewers and drains that is productive of excessive filth contamination of soil and air.

Aylesbury, in the past, has never been known to suffer from diphtheria as it has during the two epidemics recorded. The disease has in this country been largely one of rural as opposed to urban populations; but occasionally a town is attacked, and, as in the case of Aylesbury, the infection finds a congenial home and clings to it with singular tenacity. Whatever the relation of faulty sanitary conditions to the origin of the infection of this disease, it is impossible to ignore the fact that the poison clings at times with special force and virulence to localities where various forms of filth abound; and modern experience goes to show that, amongst these conditions, animal filth, such as is found in connexion with slaughterhouse refuse, as also a soil and air contaminated by decomposing and stale sewage, probably take a prominent place. Anyhow, the latter condition certainly needs to be expelled from Aylesbury before it can be regarded as a wholesome town.

THE necessity for a Royal Commission to consider the hospital question has been often urged by us. We venture to hope that this necessity is being realised by the Government, and will be acted upon ere long. It is natural that some people should feel regret that such a necessity should exist. Our voluntary hospital system is almost unique in the world. It is a proud thing to think that private and pious benevolence has been hitherto equal to the maintenance of such institutions as our hospitals. It is somewhat painful to admit any inadequacy or failure in the voluntary system; but we must look facts in the face, and the facts here are so complicated and involve so many interests and considerations, that only some highly authorised Commission could be expected to get at a knowledge of them.

Let us look for a few moments at the reasons for hoping that the Government will agree, and that speedily, to the appointment of a Royal Commission. We shall take in the first place the interests of the sick poor. If anybody wants to realise the strength of the arguments in their favour for a larger and a freer in-door accommodation in hospitals, let him read a very elaborate and thoughtful paper on the Break-down of the Hospital, by J. FRANCIS SUTHERLAND, M.D., medical officer to Her Majesty's Prison, Glasgow.[1] He shows therein the enormous amount of suffering that is not met by voluntary hospitals in a community like Glasgow by giving the facts of the mortality from phthisis and pneumonia. In Glasgow there are 2111 deaths from phthisis, of which only seventy, or 3·3 per cent., occur in all the hospitals, rated and voluntary together. Undoubtedly sufferers from a disease like phthisis, as they cannot in many cases be cured, would be best at home, if the homes were of a suitable character. But Dr. SUTHERLAND reminds us that in spite of all the improvements in Glasgow, according to the census of 1881, no less than 70 per cent. of the population lived in houses consisting of one or two apartments. And the case, alas! is not very different in Liverpool, Birmingham, and Manchester. In these one-roomed dwellings there is an average of three inmates. Fancy the riot run by the tubercle bacillus in such an atmosphere, and the unhappy lot of the patient that is left to die in it by an enlightened Christian and highly wealthy community. It is all very well to boast of the voluntary principle, and Scotland has been, and is likely again to be, rent in twain on the merits of it. But it will have to do greater things than these for the sick poor before it can assert its sufficiency. The case is equally strong, and even stronger, for other great classes of disease and suffering as it is in regard to phthisis.

Then, next in order of the interests involved, we come to the interest of the profession in regard to the provision of hospital accommodation for the working classes. This is entirely secondary to the interest of the sick poor. But it is only secondary to that. If there is one defect in Dr. SUTHERLAND'S able paper, it is that he does not deal at sufficient length with this aspect of the question, and mainly, we are sure, from the fact that he has gone so elaborately and with so much human sympathy into its other bearings. This, however, has been well discussed by other writers. A paper by one of these is before us by another Scotch physician, Dr. ERSKINE. He deals with the Abuse of our Medical Charities by the Public and the Profession. It is undeniable that sturdy and well-to-do people, and in some cases even wealthy people, avail themselves of the gratuitous and charitable systems of medical relief to save their own pockets. This is an intolerable injustice to our medical charities and to medical men, which cannot much longer be ignored. It is one of the most crying evils of our hospital system. It excites dissatisfaction amongst the charitable, and it absorbs the funds of hospitals, which are wanted badly for the wretched and the poor. Our columns testify every week that no adequate means are taken in most of our hospitals, and notably our special hospitals, for the prevention of this abuse.

Such are some of the reasons which make the case for a Royal Commission urgent. There are one or two others. One is the very general consensus of opinion in the profession and out of it for such a measure. Another is the very inadequate and feeble proposals for dealing with this momentous question put forth by those from whom we might expect better things. When a man like Sir EDMUND CURRIE seems to suggest to the London public that the great remedy for the straits of London hospitals is to convert them into provident dispensaries, it is high time that the question was looked at from all points of view. This suggestion is unjust alike to the medical profession and to the public: to the profession, because it interferes most unnecessarily with private medical practice, and caters for the working classes in matters of ordinary sickness where they are quite capable of taking care of themselves; and to the public, because it increases their embarrassment in trying to meet the hard case of the really calamitously sick, for whom our hospitals are intended, and who should find in them ample and free accommodation.

[1] To be had of W. Love, Argyle-street, Glasgow.

Annotations.

"Ne quid nimis."

THE LANCET RELIEF FUND.

IT will be remembered that we announced in our issue of the 5th inst. that the Council of the Royal College of Surgeons had unanimously adopted the proposal that their President should be one of the almoners of THE LANCET Relief Fund, subject to the approval of their legal advisers. We are now happy to state that we have received an official communication from the Secretary of the College, informing us that, with some slight alteration respecting the management and administration of the fund, as suggested by the solicitors of the College, their President can act as one of the almoners. We are further pleased to say that all preliminary arrangements have been completed for the working of the Fund, and an "application form" will be included in every number of our issue next week. This will be found in the centre of the journal, upon unnumbered pages, and can easily be removed and retained for use when required.

THE LONDON COUNTY COUNCIL.

LONDON has made her selection of representatives on the County Council, and, when consideration is had for the comparatively small number of voters who took part in the election, the result must be regarded as satisfactory. The fact that as yet the names of many councillors are unknown to the public will lead to the greater exercise of watchfulness over the Council's proceedings, and at no time will their action be more closely criticised than at the commencement of their duties. It may be hoped the expectation will be realised that they will be found able to cope successfully with the many difficulties that must attend an active London government. When it is recollected that the subject matter with which the new County Council will have to deal is of the most varied description, that health questions, problems of finance, reformatories, lunatic asylums, sewers and sewage disposal, the making of roads, and the regulation of traffic, all immediately devolve upon a newly-constituted authority, common sense indicates strongly that the first business of the Council is to arrange its administration in such a manner that these important functions shall be efficiently performed. If the first thought of the Council is to acquire new powers rather than to exercise those with which it is already endowed, there is no reason why it should retain public confidence more than the Metropolitan Board of Works. New powers will not unnaturally come if the Council show a large business capacity in dealing with the many important subjects in connexion with which it already has a statutory responsibility. This, indeed, is a certainty, for there is no other body in London which can undertake the much-needed settlement of problems such as water and gas supply to London; all that is required is that the Council should show itself worthy of a larger trust. The Local Government Act has evidently been drawn with exceeding care to enable the Council to create the organisation which is essential to success. By judicious appointments of chairman and vice-chairman respectively, it will be represented in the House of Lords and in the House of Commons; by the appointment of a deputy-chairman, who, above all things, must be a tried and trusted administrator, the Council will be able to ensure the harmonious working of the many committees who will be responsible for various departments. It was the want of a high official with functions of this nature that placed the Metropolitan Board of Works at a disadvantage. The local administration of a large city like London must have a business manager, devoting his whole energies to the routine work of his Board and not permitted to occupy the more representative position, which should devolve upon the chairman and vice-chairman. But an earlier step which must be taken by those newly elected is the selection of aldermen who will be required to complete the administrative body. It has not unwisely been urged that citizens should be appointed of recognised capacity and skill in the various branches of knowledge, and able to aid the Council on occasions when their services might be specially required. If this power be exercised with discretion, the Council will possess an intellectual strength which will be a material safeguard against possibility of error. We would earnestly advocate the view that the sciences, cognate to the Council's work, should be amply represented amongst its members. It is the universal desire of Londoners that their County Council should provide a permanent and successful system of metropolitan administration. It begins its duties with the best wishes and sympathies of all, and nothing but mistakes of its own creating can prevent it from rendering the effectual service which has long been wanting for improving the circumstances of our municipal life.

THE BIRMINGHAM INFIRMARY.

WE have so fully discussed the unsatisfactory nature of the administrative arrangements of the Birmingham Infirmary, by which it is sought to compensate for an insufficiency of medical staff, that we do not desire to devote more space to this subject; but we are compelled again to make reference to it, for the reason that the Birmingham Board of Guardians have referred to the Infirmary Management Committee a proposal emanating from Mr. Lawson Tait, who writes with admiration of the completeness of the arrangements effected by the guardians for the increased care of the sick poor. Referring to the discussion which had taken place in the newspapers concerning the extent to which the board had officered the new institution, he said that while he could not but feel that there was a certain degree of foundation for the criticisms offered, yet, on the other hand, he was perfectly certain that the guardians had gone to the utmost of their power in this direction, and that they had, in fact, secured a very much better arrangement than probably existed in any other institution in the kingdom. We note with astonishment Mr. Tait's belief in the limitation of the powers of the guardians, but he omits to mention whether this unfortunate circumstance is due to deficiency of funds, or to an unwillingness on the part of the Local Government Board to consent to their disbursement. Now Birmingham is not too poor to pay a few medical officers, nor do we believe the Local Government Board would place difficulties of this kind in the way of effectual administration of Poor-law institutions. We must regard therefore Mr. Tait's preliminary observations as of merely complimentary nature, not to be taken too seriously, and as only paving the way to the more important part of his communication. His ability to compare this institution with others of the same kind he acknowledges to be limited, for there was only one other such institution with which he was at all familiar. We may go on therefore to announce to the profession the remedy which Mr. Tait suggests for conditions which, as already stated, he admits afford some degree of foundation for the criticisms offered. His proposal is that the guardians should utilise the services of some of the more eminent medical citizens, who should act as an honorary consulting staff. These gentlemen, he said, "could easily afford to

offer the guardians, without any remuneration, assistance which, even if of no great practical value, might give an additional appearance of strength to the medical staff, and which could not but increase public confidence," and expressed his own willingness to act in this capacity; this letter, as we have said, the guardians have seen fit to refer to a committee. We cannot disguise our astonishment that a proposal should be made, and thought worthy of consideration, which is intended to give an apparent and fictitious strength to the staff. It is another of the follies incidental to an attempt to administer this institution on other than sound principles. Mr. Tait's proposal condemns itself, and we trust the citizens of Birmingham will not allow themselves to be misled by a mere "appearance." We commend the letter to their consideration rather than to that of the Infirmary Committee.

THE UNIVERSITY OF LONDON.

THE meeting of Convocation on the 22nd inst. was singularly devoid of interest. The chairman, Dr. F. J. Wood, explained that the Commission had not yet reported, but gave no indication as to when the report might be expected. Indeed, the whole proceedings seemed to be carried on under the shadow of the unknown fate awaiting the University at the hands of the Commission, and one of the speakers characterised the meeting as the most doleful that in his memory had ever been held. The only business done was to pass the recommendations of the Annual Committee that the examination in mathematics at the Intermediate B.A. Examination, and that on mechanics at matriculation, should be taken early in the examination; and also to pass a resolution, moved by Mr. Rabson, B.A., approving the formation of a debating society by members of the University, to meet in the University building. Mr. Cotton, B.A., had two resolutions, one of which was to appoint professors on subjects for the higher degrees, which was negatived by a large majority; and the other to approve of the formation of reading societies, which was lost by the casting vote of the chairman. But the number of graduates present was small, and the proceedings were very dull. It would almost seem as if Convocation, not knowing what powers may be left to it if the University is reorganised, were feeling that masterly inactivity should be its *rôle* at present. The only motion of interest to medical graduates—urging the desirability of a paper in surgery being added to the Pass Examination for the B.S. degree,—standing in the name of Dr. W. J. Collins, was postponed owing to the illness of that gentleman.

MECHANICAL TREATMENT OF TABES DORSALIS.

A SINGULAR method of treating cases of locomotor ataxy has, during the past three months, been tried at the Salpétrière, and the results have been so satisfactory that M. Charcot recently devoted one of his lectures (*Progrès Médical*, Jan. 19th) to the subject, demonstrating the cases so dealt with. The practice is not absolutely novel, since in 1883 it was brought forward by Motchoukowsky of Odessa, who claimed that twelve tabetics had been greatly benefited by it, and also that the plan was of use in cases of sexual impotency apart from tabes. Last year M. Raymond, when on a visit to Russia, heard of the practice, and introduced it to M. Charcot's notice, and, as above said, it has been adopted in M. Charcot's wards during the past three months, the "chef de clinique," M. Gilles de la Tourette, superintending it. It simply consists in suspending the patient by means of Sayre's "jury-mast" for a period beginning with a duration of half a minute and progressively increasing up to three or at the most four minutes, an interval of two days occurring between each suspension. In order to exert greater traction on the spinal column, it is well to raise the arms every fifteen or twenty seconds. Eighteen tabetics have thus been treated, embracing about 400 "suspensions." Excluding four who were not suspended more than three times, the improvement was marked in fourteen, and eight of these most remarkably. They were all confirmed cases, and had mostly been treated by cauterisation along the spine. Almost from the commencement of the suspension treatment the patients would improve in walking—an improvement at first temporary, but after eight or ten suspensions becoming continuous. They could then stand more easily, and walk without assistance. After twenty or thirty suspensions Romberg's symptom disappeared. There was also relief from vesical troubles, when these existed; diminution and even disappearance of lightning pains; return of sexual desire and capacity. Anæsthetic and other sensory disturbances also disappeared, and the general condition of the patient improved, sleep being better, &c. One case had a return of lightning pains whilst being treated, but subsequently again underwent improvement, which in all the rest was uninterrupted. In no case did the knee-jerk return, or the pupil reaction become normal. The method has also been applied to a few non-tabetic cases, as Friedreich's disease, neurasthenia, and disseminated sclerosis; but, as M. Charcot observes, the method is still in the experimental stage. So far the results in tabes are encouraging, whilst the simplicity and harmlessness of the method are additional recommendations for its further trial.

JUVENILE PUNISHMENT.

NEVER perhaps has the subject of corporal punishment as applied in schools received so large a share of attention as has lately been devoted to it in the daily press. There is, in the course of a lengthy correspondence, a nearly unanimous concurrence in the opinion that personal correction of some sort is necessary to the maintenance of order, and that chastisement which appeals merely to the moral nature is quite inadequate to its purpose. There has been a good deal of wordy philosophising on the design of bodily punishment and the spirit in which it should be administered. This, no doubt, is useful in its way, but still more useful are some of the practical suggestions which have crystallised out of the discussion. The principles upon which these are mainly founded are the recognition of responsibility implied in deferring for an hour or two the infliction of the penalty and placing it under the control of head masters, the need of avoiding any risk of serious bodily injury, and the value of a thorough understanding on the whole question between the magisterial and the school authorities. There can be no question as to the imprudence of any loss of temper on the part of schoolmasters; and we may freely allow that a degree of irritability is almost unavoidable in dealing with some children. Still, it does not follow that this difficulty can best be treated by a postponement of punishment till after school hours. In the case of a light offence the child in fault would often prefer to suffer at once and have his or her trouble over, than wait an hour or two in suspense. Probably, too, order would best be maintained if the master or mistress were allowed a somewhat freer hand in inflicting summary chastisement. We can even imagine cases in which delay might be compared to the folly of waiting to read the Riot Act in the face of a charging mob. Should occasion arise for severer measures than usual, a postponement would naturally be called for. In such an event the matter should most properly be left in the hands of the head master, but it seems absurd to argue that none of his assistants can exercise a like function in regard to minor

offences. The best safeguards against an abuse of authority should rather be sought for in arrangements which prohibit indiscriminate cuffing and the use of any but the lightest available instruments of punishment; care, too, must of course be taken to apply them with some regard for moderation, and at parts where no vital harm can result. It is from no want of kind feeling that we advocate a moderate exercise of those old methods of school discipline whose efficacy experience has proved. On the contrary, it is evident that the absence of such training simply implies a surrender of our duty to the diligent and orderly in our vain efforts to persuade the ill-conducted. Just, needful, instructive, and preventive often of greater misconduct afterwards, such timely and considerate punishment as we have described is merciful also. With some exceptions in favour of delicate or merely slow children, its general employment cannot fairly be objected to. But it is unquestionably necessary that the power of exercising such punishment should be restricted to responsible persons, and not delegated to the hands of emotional or inexperienced underlings.

THE INCUBATION PERIOD OF INFECTIVE DISEASES.

WE trust that the letter from Dr. Broadbent, the late President of the Clinical Society, which will be found elsewhere, will result in a large accession of well-authenticated facts to the subject of the inquiry now being undertaken by a committee of that Society. The evidence essential to determine the date of incubation of any disease must be very strong to be accepted, so that every practitioner who has facts to contribute (and who has not?) must see that no material issues are overlooked. Some years ago, when the Clinical Society first entertained the notion of an inquiry of this kind, a most valuable paper was contributed by the late Dr. Murchison, in which he adduced facts tending to prove that the incubation period of scarlet fever may vary from less than twenty-four hours to six days. It is hardly necessary to emphasise the value and importance of more accurate knowledge of this part of the natural history of specific fevers.

COLDS AND CLOTHING.

THE teaching of modern science and of ancient custom goes to show that heat production within the body has much to do with the tissue changes concerned in muscular activity and with healthy digestion. It is conserved by warm and moderate, wasted in evaporation by excessive, clothing. Finally, by a simple nervous reaction, it is increased after the contact of external cold. It follows from these observations that, if we be so clad with comfortable under-clothing that surface perspiration is not formed in excess and is rapidly removed, one great cause of chill—sudden evaporation—is done away with. Outer cold, then, provided it is not too severe, only touches, as it were, the spring of the heat-making metabolism, and, exciting an elastic rebound in the chain of vaso-motor fibres, awakens that oxidative action by which every tissue is made to yield its share of heat to the body. This bracing influence is lost wholly or partly to those who are too heavily clothed, and in its place we may have a dangerous excess of surface heat. It is for this reason that we have before protested, as we now do, against the indiscriminate use of the thick and heavy over-coat. We would rather see men in fairly robust condition, especially if young, clad warmly next the skin, and wearing either a light top-coat or none at all. There can be no doubt that the habitual use of great-coats is indirectly accountable for the chills which they are intended to prevent. Were the over-coat worn continuously it might attain its object. Its intermittent use, even when ample under-clothing is worn, affords no solid guarantee of safety, but rather the reverse. The man of sedentary habits has especial need to remember this. He emerges daily from a warm breakfast-room clothed in his ordinary winter garments, with probably woollen under-wear, and over all the heavy ulster or top-coat. After a short walk he finds that the sense of warmth he began with is more than maintained. He arrives at his office or place of business, and off goes the over-coat, though the air of the newly-opened room is as cold as that without, and draughty in addition. During the day perhaps he travels to and from adjacent business houses wearing only his house clothing. The over-coat is laid aside till closing time reminds him of the journey home. The frequent result is that somehow between the hours of his departure and return he is chilled. No doubt he would run as great a risk, if lightly clad, he were to face the rigour of a winter day. In this case, however, exercise and habit might do much to develop the power of endurance, and there would, at all events, be less danger of sudden cold acting upon a freely perspiring surface. Woollen under-clothing represents a state of healthy comfort intermediate between these extremes, and more resistant to chill than either. In commending its use, however, we do not assert that the influence of age and constitution is to be overlooked. Youth can oppose a power of resistance to depressing agencies which does not reside in the worn-out nerve centres of a riper age. Similarly, that elastic reaction which characterises the nervous and sanguine types is not to be looked for in the lax tissues of the lymphatic. The weaker physique naturally calls for fuller protection than the stronger; and any rule requiring the disuse of the over-coat should allow of reasonable exceptions in favour of the old and constitutionally feeble. Unusual severity of weather, especially if associated with night air and the loss of sleep which this implies, is another condition which might well constitute an exception. In such a case we are compelled to add some form of over-coat to the ordinary amount of clothing. Some parts of the body—for example, the chest, throat, and feet—are certainly more susceptible to cold than others. As a useful safeguard, cold or tepid bathing of such parts is in merited favour. The custom so common with many persons, especially women, of walking out in thin-soled boots often plays an important part in catching cold. The progress of time and of rational thought may be expected to bring in a more comfortable arrangement by clothing the foot in woollen hosiery and a stouter boot.

ITALIAN MEDICAL LEGISLATION.

ACCORDING to a writer in the *Riforma Medica* the reforms embodied in the new sanitary law, which has just been voted by the Italian Parliament, have been discussed in scientific circles for more than twenty years, though the almost absolute silence of the political press and the indifference of the public—who even now scarcely understand the matter—during this period might lead one to think that the subject has only quite recently been thought of. The new law does not give entire satisfaction. Discussion was somewhat stifled by the decision of the Government that the Bill must be passed as it was returned from the Senate or put aside till a more fitting time, which would have led to sanitary reform being indefinitely postponed, or to its being discussed in a still more hurried and summary manner after some such epidemic, like that of 1884, had roused the Government and people, and driven away the foreigner who goes to Italy in search of health. Although certain emendations would have been desirable, the law must be frankly accepted in the hope that the Government will keep its promise to provide for certain matters in the regulations, and that the future may bring improvements

which at present it would be useless to hope for. It must be admitted that the Government has organised a good deal in a short time—e.g., the Sanitary Department in the Ministry of the Interior, the Vaccine Institute, the School of Hygiene, &c.; so that an earnest has been given of admirable sanitary administration in the future. In the present law a regular chain of authority has been established connecting the subordinate sanitary officials through local medical officers with the provincial medical officer, who is himself under the Provincial Medical Council, which in its turn is supervised by the Sanitary Department of the Ministry of the Interior. Doubtless all that is new in this system will require time to get into working order, and the various officials and corporate bodies will have to a considerable extent to educate themselves to their work; but there is no reason to doubt that this process will go on satisfactorily, even if, perhaps, somewhat slowly.

THE CASE OF STRANGULATION AT POPLAR.

THE conflicting testimony of the medical witnesses who examined the body of the woman Rose Millett, which was found in Clarke's-yard, High-street, Poplar, on Dec. 20th, contains several points of forensic interest. It will be remembered that the deceased was addicted to intemperance, and in support of the theory that she was intoxicated at the time of her death is the fact that an analysis of a table-spoonful of the contents of the stomach revealed the presence of a teaspoonful of whisky. There seems little reason to doubt that the marks on the neck described as abrasions were caused by the woman herself in making a futile attempt to free herself from the constricting or compressing medium. The mark on the left side of the jaw might easily be produced by contact with the ground either before, during, or immediately succeeding the act of dying. Parenthetically, we may observe that stiffness of the left arm and leg was owing to the early onset of rigor mortis in those parts consequent upon rapid cooling from contact with the cold earth. The place where the body of the deceased was discovered was not paved, but consisted of broken ground, a condition favourable for showing the marks of a struggle had any such taken place. We understand there were no such marks. Drs. Brownfield, Hibberd, and Harris observed a narrow line on the neck such as would be produced by constriction with a piece of string. This line was broken behind for two or three inches (as regards its obliquity we find no mention in the record)—a fact equally consistent with the theories of homicidal and accidental strangulation. There was extravasation of blood around the larynx, but there appears to have been no cutaneous or subcutaneous lacerations of tissue which one would expect to find in a case of strangulation effected by a piece of string. Moreover, when Mr. Bond examined the body five days after the first inspection the alleged homicidal strangulation mark had disappeared. A handkerchief untied was found round the neck. In the absence of evidence to the contrary, we take it that the ends were in front; if so, this could not well have been the cause of the strangulation. The question at issue between Mr. Bond on the one hand and the witnesses before mentioned on the other is as to the manner and means in which strangulation was caused. The former gentleman, whose experience gives great weight to his opinion, contends that the death was accidental and not homicidal, and urges in support of his contention the facts that (1) the woman's skin would readily have received and retained for as long as five days at least the mark of a cord or string employed to compass acute strangulation; (2) that there was no protrusion of the tongue or eyeballs; (3) that there was no laceration of the tissues of the neck. In support of Mr. Bond's opinion, we may say that neither cord nor string was found on or near the body; that the woman, if in a state of intoxication, might be able to clutch at her neck and yet be unable to release herself from the cause of her distress; and, further, that very little force is required to produce hæmorrhage in tissues whose nutrition has been long impaired by the action of alcoholic intoxicants. Upon Mr. Bond's hypothesis that the linear mark on the neck was caused by pressure of the collar of the jacket we can offer but little comment. It does not, however, seem to us that even the narrow mark, as described, could not have been produced in the manner Mr. Bond suggests. We would ask were the situation and direction of the mark consistent with his assumption? Had this mark been effected by a piece of string crossed in the manner supposed by one of the medical witnesses, we should certainly expect to find more abiding evidence of its existence, and probably the absence of the mark behind would not have obtained. Of course, we are writing from a statement of facts which may not have been fully and correctly reported, but the balance of evidence seems to point to the theory that the death was accidental, and not homicidal.

ASSOCIATION OF MEMBERS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

AT a meeting of the committee of the Association, held on the 18th inst., the following resolution was carried unanimously:—"That this committee views with extreme regret the attempt made by Sir Spencer Wells, in the resolution he proposed at the last Council meeting, to abolish the annual meeting of the Fellows and Members at the Royal College of Surgeons; and at the same time the committee desires to express its satisfaction with the action of the majority of the Council, who by their votes successfully opposed the resolution referred to." The Association will hold their annual general meeting at the Holborn Restaurant at 6 P.M. on Thursday, Jan. 31st. The meeting will be followed at 7 P.M. by the annual dinner. Cards may be obtained by Members of the College on sending the subscription (5s.), together with the cost of the dinner ticket (5s.), to the hon. treasurer, Deputy Surgeon-General C. M. Jessop, 98, Sutherland-avenue, W.

SCHOOL CLOSURE AND MEASLES AT HANLEY.

SOME friction has been caused at Hanley by reason of the action of the sanitary authority as to the closure of the elementary schools owing to a serious prevalence of measles, particulars of which are given in another column. The sanitary authority unfortunately made an initial mistake by only "requesting" the school authorities to close their schools, and this request was not complied with. It was only after this that the Town Council found out that the whole responsibility as to school closure rested with them, and that the managers were bound to comply with any notice "requiring" them for a specified time to close their schools. In this way time was lost, and now there is a diversity of opinion as to whether the school closure, which was ultimately carried out, did good or harm. Measles is one of those diseases towards the prevention of which but little has been done, and it is probable that the expediency of closing schools altogether, or of resorting to the alternative of excluding from school such scholars as come from infected places, may very much depend on the circumstances of each several outbreak. But one thing seems certain, and that is that school closure, in order to be most operative for good, must be resorted to at an early stage of the outbreak, and not when the disease is already spread broadcast. In this Hanley case no less than 210 deaths have occurred, and the attacks are said to have

numbered several thousand. The responsibility of the sanitary authority was therefore a great one, and their action should have received the support of the public. But with such final results it becomes almost impossible to judge how far a measure of prevention adopted during the full course of the outbreak operated for good or not. The account furnished by a correspondent of the recent outbreak is of interest not only for the manner in which the epidemic spread, and the high mortality attending it, but for the great predominance of severe laryngeal and pneumonic complications. The details thus supplied prove that the epidemic was not one of "German measles," as currently reported some weeks ago, for, although a few medical men have had one or two cases of "rötheln," the type of the disease, apart from its fatality, does not resemble that comparatively mild affection.

THE MANSION HOUSE MEETING ON THE HOSPITAL QUESTION.

THE meeting to be held by the kindness of the Lord Mayor on the 29th inst. to consider the best means of increasing the support of hospitals is likely to be an important one. The great question is whether by more perfect organisation the contributions in London of the working classes can be increased. There can be no doubt they are miserably disproportioned to the numbers and importance of London workers, and far behind those of many provincial towns—as Birmingham, Leeds, Newcastle-on-Tyne, and Sunderland. In some works, we believe we are right in saying, particularly those of Sir William Armstrong, the sum is subtracted weekly from the wages, and is paid so most cheerfully. Could this not be done by consent of masters and men very extensively in London? As a corollary to it, there is a substantial representation of working men on the committee of the local infirmary, and we have reason to believe that they do their part with creditable intelligence and liberality. In Newcastle-on-Tyne the subscriptions of working men have gone up roughly in a year from £1550 to £2503. But let not the rich suppose that they have done all they can. A little more systematic benevolence on their part will greatly encourage the working classes to contribute out of their scantier means.

SUPPURATING HYDATID OF THE ABDOMEN TREATED DURING PREGNANCY.

IN the *Australian Medical Journal* of last month, Mr. Girdlestone records an interesting case of hydatid cyst of the abdomen which required treatment during pregnancy. The patient, aged thirty, had noticed swelling of the abdomen nine months previously, or two months after the birth of her last child. This swelling had been tapped four times. The diagnosis of hydatid was confirmed by the character of the fluid withdrawn; but on admission her temperature and symptoms pointed to suppuration of the cyst. A rounded tumour could be felt in the abdomen projecting against the anterior wall, its upper limit reaching above the umbilicus; it was slightly movable. Mr. Girdlestone passed three long steel acupressure pins, and inserted each of them deeply through the abdominal wall, then through the front of the cyst, bringing the points out through the skin on the opposite side of the tumour; the pins were parallel to each other and three-quarters of an inch apart. Some silk ligature was then twisted round them in the form of the figure 8 over the skin, so as to retain the cyst in contact with the peritoneal lining of the abdomen with a moderate amount of pressure. On the following day the silk ligature was divided, the centre pin withdrawn, and the cyst opened by an incision which extended between the remaining pins. The wall of the cyst was then attached to the skin by four interrupted wire sutures, and the contents evacuated. A large drainage tube was inserted, and retained by fastening it to the wire sutures; the remaining pins were now removed. The cyst was washed out with perchloride solution and dressed antiseptically with iodoform. Recovery was uninterrupted, the wire sutures were removed at the end of a week, and the cavity gradually closed. The operator was led to employ the long pins in order to procure more certain adhesion of the cyst to the abdominal wall, having had a case of somewhat similar kind in which, from some unexplained cause, the cyst became detached at the end of three weeks and the patient died of peritonitis. Another advantage claimed is the possibility of using the scalpel instead of the trocar, and thus giving free exit to the contents of the cyst.

DR. GOWERS.

WE learn that Dr. Gowers has tendered his resignation of the chair of Clinical Medicine in University College, London, and the post of Physician to the Hospital. The cause of his resignation is, we understand, that he does not find himself able to continue to perform his duties in a thorough manner, and at the same time to meet the claims of private practice. It is to be regretted that this distinguished teacher and successful physician should sever his connexion with University College at, comparatively speaking, so early an age, but it may be hoped that his friends and pupils will long continue to enjoy his lucidity and thoroughness as a teacher at the National Hospital for Epilepsy and Paralysis, to which institution Dr. Gowers still remains physician. It may surprise some to hear that Dr. Gowers' resignation comes comparatively early in life, for his work has been so extensive and has become so familiar to all that he seems to have accomplished more than many men of advanced age.

THE PERILS OF FOOTBALL.

ONCE more we have to direct attention to the dangerous nature of this game, and to call for such a reasonable measure of reform as may make it a healthy amusement and a decent pastime. As at present played—we had almost written waged—it is too often neither. The local press is reported as describing a recent match at Gloucester as a "dull, uninteresting, and brutal struggle." To judge from the list of accidents recorded as having happened on Saturday last, we fear this latter description must be only too frequently applicable. At Stoneywood, near Aberdeen, a player had his leg broken; at Chelmsford, G. H. Gray, the secretary of the home club, was charged by "a much bigger man, with the result that one of Gray's legs was broken." In a match at Leicester, one of the Leicester team "received a serious injury during a scrimmage. He fell on the ball and was accidentally kicked in the back of the head. He was carried unconscious from the field, and now lies in a dangerous condition from concussion of the brain." During a game at Gloucester, "a three-quarter back in the Newport team sustained a fracture of the thigh. While running, he was violently tackled and thrown down, a number of the other players falling on him." On Tuesday last, an inquest was held on the body of Mr. C. E. Moorhead Smith, whose death was caused by injuries received at a football match played at Blackheath. The medical evidence proved that the cause of death was injury to the spine, and one of the medical witnesses remarked that he regarded the Rugby game as a highly dangerous one, and he believed that there was hardly a game of any importance at which some accident, more or less serious, did not occur. The coroner said this was one of the most melancholy cases he had investigated since he had acted as coroner. He had a strong prejudice against

the Rugby game, and thought it was much to be regretted that young men persisted in sport of such a dangerous character. The jury returned a verdict of "Accidental death." Last week we reported another fatal accident at Grimsby. It would be interesting to know what is the average number of football accidents occurring on Saturday afternoons.

THE METROPOLITAN HOSPITAL.

FOR many weeks past we have given willing insertion to correspondence on a novel attempt to convert a London hospital into little more than a provident dispensary. The correspondence has been fair and well sustained on both sides, and our readers will judge for themselves. Nothing could be more courteous and conciliatory than the letters of Dr. Basil Morison, who has accepted medical office in the hospital under the provident arrangement. He argues that such an arrangement is less injurious to the independence of patients and the interests of medical men than if the hospital had been conducted on the ordinary principles of gratuitous relief, and he receives in good part every reasonable complaint of cases of abuse. He has said whatever can be said for such an arrangement. But we remain of opinion that such a system is indefensible. The objections to it are stated categorically in a protest which we publish in another column to-day, endorsed in a letter from Mr. Sandiland. This letter and other preceding ones are difficult to answer. The hospital was meant for the poor, but the poor are discouraged here. Hospitals were not intended for the treatment of the ordinary ailments and diseases of the working classes, on a system of periodical payment. But this hospital lays itself out for such work, and the scale of payment is less than that of the metropolitan provident dispensaries. Cases of abuse seem numerous, and the checks seem insufficient. The ordinary provident dispensary is thought by some medical men to interfere unduly with private medical practice. But in this case, all the prestige of a hospital, with its consultant staff, is brought into the service of the provident dispensary, and is used to attract thousands of patients, most of whom are quite capable of having and paying their own local practitioner. This is neither philanthropy nor policy. It facilitates mean and ungenerous fraud on the medical profession, and it leaves undone the great work for which hospitals were originally created, and which alone justifies their existence—i.e., providing accommodation for serious cases among the decent poor which cannot well be treated at home. We heartily endorse the protest of neighbouring practitioners against such uses of a hospital, and we trust the public will require the hospital to stick to its own proper duties.

CHILDREN IN THEATRES.

EVERY winter brings its pantomimes, and with equal regularity, it appears, its complaints of children drawn away from school work to spend a somewhat hard holiday in providing the theatrical pleasure of the season for their fellows. A few days ago some seven children under the prescribed age of ten years were found to be employed at the Prince of Wales's Theatre, Greenwich. Their duties, indeed, were not heavy, but they were such as to interfere for six weeks with school attendance. Other theatres, it is said, have in the same way engaged a much larger number of school children. It may be argued that their doing this is profitable to the pleasure-seeker and to their own parents. This we do not deny. It does not appear, however, that the young performers themselves are equally benefited. The question is virtually one of money against education, and the child actor is not in any case the chief gainer by the transaction. At an age when his proper duty is to learn he is drafted off to an atmosphere totally different from that of school. It is out of the question that he should at the same time attend school with any appreciable profit. Even if he could do so, his divided and onerous tasks would in most cases impose a dangerous double strain, both mental and physical—at all events, where the theatrical work was daily carried on. He must therefore act at the expense of his ordinary education. As a rule, he must also live the while an unwholesome life of late hours, close air, and excitement. In the circumstances, and in view of the fact that children over ten years of age are eligible for theatrical work, we can see no injustice in the legal restriction imposed in such cases, or in the very moderate fine of one guinea imposed in the instance we have quoted.

SIGNOR CARLO PELLIGRINI.

BY the death of Signor Carlo Pelligrini we have lost probably the most brilliant foreign caricaturist that has ever visited this country. A Neapolitan by birth and an Italian in all his thoughts and feelings, he came to England some twenty years ago. The public very soon became familiarised with his brilliant caricatures in *Vanity Fair* of the best known men of the day in politics, literature, the arts, sciences, and general society. The medical profession will take an interest in his career, now unhappily cut short, not only on account of his drawings of the physicians and surgeons who have been and are eminent in their day, but also because he possessed in the most remarkable degree the ability to draw a likeness or caricature from memory of a person whom he had perhaps seen for only a few minutes. As an instance of this peculiar power may be mentioned that one of the best caricatures he ever executed was that of a distinguished diplomatist, who, being attached to a foreign Court, and attracting considerable attention at the time, was in London for a few days. Having been requested to make a drawing of this gentleman, the only opportunity which Signor Pelligrini could obtain of seeing him was whilst he was standing in conversation with someone for a few minutes in the Park. Although he had not been previously familiar with his appearance, this was quite enough to enable the artist to draw, after his return home, one of the most characteristic cartoons that he has ever done. The first member of our own profession to be delineated by his facile pencil was Sir William Fergusson; and amongst the best-remembered cartoons will be those of Sir William Jenner, Sir James Paget, Sir William Gull, and Sir Henry Thompson. The last drawing which he made for *Vanity Fair* before his fatal illness was of Sir William Dalby.

SICK NURSING FOR THE POOR.

ARRANGEMENTS for nursing the sick poor in their own homes constitute one of the most needful and meritorious projects of our time. This movement, which we have before had pleasure in advocating, is already well established at different centres throughout the country. In connexion with one of these, Lord Lorne has lately discussed the subject with considerable discrimination. The Glasgow Association, at the annual meeting of which he presided, employs a staff partly of trained, partly of untrained workers, the latter being under the supervision of the former. It also provides, in addition to those occupied in its charitable work, a separate staff for attendance on more remunerative patients. These are, so to speak, its breadwinners, and prevent it from being wholly dependent on public subscriptions. Both of these provisions are calculated to strengthen the influence of the Society; and the first mentioned need not, if carefully administered, impair the due discipline and

numbered several thousand. The responsibility of the sanitary authority was therefore a great one, and their action should have received the support of the public. But with such final results it becomes almost impossible to judge how far a measure of prevention adopted during the full course of the outbreak operated for good or not. The account furnished by a correspondent of the recent outbreak is of interest not only for the manner in which the epidemic spread, and the high mortality attending it, but for the great predominance of severe laryngeal and pneumonic complications. The details thus supplied prove that the epidemic was not one of "German measles," as currently reported some weeks ago, for, although a few medical men have had one or two cases of "rötheln," the type of the disease, apart from its fatality, does not resemble that comparatively mild affection.

THE MANSION HOUSE MEETING ON THE HOSPITAL QUESTION.

THE meeting to be held by the kindness of the Lord Mayor on the 29th inst. to consider the best means of increasing the support of hospitals is likely to be an important one. The great question is whether by more perfect organisation the contributions in London of the working classes can be increased. There can be no doubt they are miserably disproportioned to the numbers and importance of London workers, and far behind those of many provincial towns—as Birmingham, Leeds, Newcastle-on-Tyne, and Sunderland. In some works, we believe we are right in saying, particularly those of Sir William Armstrong, the sum is subtracted weekly from the wages, and is paid so most cheerfully. Could this not be done by consent of masters and men very extensively in London? As a corollary to it, there is a substantial representation of working men on the committee of the local infirmary, and we have reason to believe that they do their part with creditable intelligence and liberality. In Newcastle-on-Tyne the subscriptions of working men have gone up roughly in a year from £1550 to £2503. But let not the rich suppose that they have done all they can. A little more systematic benevolence on their part will greatly encourage the working classes to contribute out of their scantier means.

SUPPURATING HYDATID OF THE ABDOMEN TREATED DURING PREGNANCY.

IN the *Australian Medical Journal* of last month, Mr. Girdlestone records an interesting case of hydatid cyst of the abdomen which required treatment during pregnancy. The patient, aged thirty, had noticed swelling of the abdomen nine months previously, or two months after the birth of her last child. This swelling had been tapped four times. The diagnosis of hydatid was confirmed by the character of the fluid withdrawn; but on admission her temperature and symptoms pointed to suppuration of the cyst. A rounded tumour could be felt in the abdomen projecting against the anterior wall, its upper limit reaching above the umbilicus; it was slightly movable. Mr. Girdlestone passed three long steel acupressure pins, and inserted each of them deeply through the abdominal wall, then through the front of the cyst, bringing the points out through the skin on the opposite side of the tumour; the pins were parallel to each other and three-quarters of an inch apart. Some silk ligature was then twisted round them in the form of the figure 8 over the skin, so as to retain the cyst in contact with the peritoneal lining of the abdomen with a moderate amount of pressure. On the following day the silk ligature was divided, the centre pin withdrawn, and the cyst opened by an incision which extended between the remaining pins. The wall of the cyst was then attached to the skin by four interrupted wire sutures, and the contents evacuated. A large drainage tube was inserted, and retained by fastening it to the wire sutures; the remaining pins were now removed. The cyst was washed out with perchloride solution and dressed antiseptically with iodoform. Recovery was uninterrupted, the wire sutures were removed at the end of a week, and the cavity gradually closed. The operator was led to employ the long pins in order to procure more certain adhesion of the cyst to the abdominal wall, having had a case of somewhat similar kind in which, from some unexplained cause, the cyst became detached at the end of three weeks and the patient died of peritonitis. Another advantage claimed is the possibility of using the scalpel instead of the trocar, and thus giving free exit to the contents of the cyst.

DR. GOWERS.

WE learn that Dr. Gowers has tendered his resignation of the chair of Clinical Medicine in University College, London, and the post of Physician to the Hospital. The cause of his resignation is, we understand, that he does not find himself able to continue to perform his duties in a thorough manner, and at the same time to meet the claims of private practice. It is to be regretted that this distinguished teacher and successful physician should sever his connexion with University College at, comparatively speaking, so early an age, but it may be hoped that his friends and pupils will long continue to enjoy his lucidity and thoroughness as a teacher at the National Hospital for Epilepsy and Paralysis, to which institution Dr. Gowers still remains physician. It may surprise some to hear that Dr. Gowers' resignation comes comparatively early in life, for his work has been so extensive and has become so familiar to all that he seems to have accomplished more than many men of advanced age.

THE PERILS OF FOOTBALL.

ONCE more we have to direct attention to the dangerous nature of this game, and to call for such a reasonable measure of reform as may make it a healthy amusement and a decent pastime. As at present played—we had almost written waged—it is too often neither. The local press is reported as describing a recent match at Gloucester as a "dull, uninteresting, and brutal struggle." To judge from the list of accidents recorded as having happened on Saturday last, we fear this latter description must be only too frequently applicable. At Stoneywood, near Aberdeen, a player had his leg broken; at Chelmsford, G. H. Gray, the secretary of the home club, was charged by "a much bigger man, with the result that one of Gray's legs was broken." In a match at Leicester, one of the Leicester team "received a serious injury during a scrimmage. He fell on the ball and was accidentally kicked in the back of the head. He was carried unconscious from the field, and now lies in a dangerous condition from concussion of the brain." During a game at Gloucester, "a three-quarter back in the Newport team sustained a fracture of the thigh. While running, he was violently tackled and thrown down, a number of the other players falling on him." On Tuesday last, an inquest was held on the body of Mr. C. E. Moorhead Smith, whose death was caused by injuries received at a football match played at Blackheath. The medical evidence proved that the cause of death was injury to the spine, and one of the medical witnesses remarked that he regarded the Rugby game as a highly dangerous one, and he believed that there was hardly a game of any importance at which some accident, more or less serious, did not occur. The coroner said this was one of the most melancholy cases he had investigated since he had acted as coroner. He had a strong prejudice against

the Rugby game, and thought it was much to be regretted that young men persisted in sport of such a dangerous character. The jury returned a verdict of "Accidental death." Last week we reported another fatal accident at Grimsby. It would be interesting to know what is the average number of football accidents occurring on Saturday afternoons.

THE METROPOLITAN HOSPITAL.

FOR many weeks past we have given willing insertion to correspondence on a novel attempt to convert a London hospital into little more than a provident dispensary. The correspondence has been fair and well sustained on both sides, and our readers will judge for themselves. Nothing could be more courteous and conciliatory than the letters of Dr. Basil Morison, who has accepted medical office in the hospital under the provident arrangement. He argues that such an arrangement is less injurious to the independence of patients and the interests of medical men than if the hospital had been conducted on the ordinary principles of gratuitous relief, and he receives in good part every reasonable complaint of cases of abuse. He has said whatever can be said for such an arrangement. But we remain of opinion that such a system is indefensible. The objections to it are stated categorically in a protest which we publish in another column to-day, endorsed in a letter from Mr. Sandiland. This letter and other preceding ones are difficult to answer. The hospital was meant for the poor, but the poor are discouraged here. Hospitals were not intended for the treatment of the ordinary ailments and diseases of the working classes, on a system of periodical payment. But this hospital lays itself out for such work, and the scale of payment is less than that of the metropolitan provident dispensaries. Cases of abuse seem numerous, and the checks seem insufficient. The ordinary provident dispensary is thought by some medical men to interfere unduly with private medical practice. But in this case, all the prestige of a hospital, with its consultant staff, is brought into the service of the provident dispensary, and is used to attract thousands of patients, most of whom are quite capable of having and paying their own local practitioner. This is neither philanthropy nor policy. It facilitates mean and ungenerous fraud on the medical profession, and it leaves undone the great work for which hospitals were originally created, and which alone justifies their existence—i.e., providing accommodation for serious cases among the decent poor which cannot well be treated at home. We heartily endorse the protest of neighbouring practitioners against such uses of a hospital, and we trust the public will require the hospital to stick to its own proper duties.

CHILDREN IN THEATRES.

EVERY winter brings its pantomimes, and with equal regularity, it appears, its complaints of children drawn away from school work to spend a somewhat hard holiday in providing the theatrical pleasure of the season for their fellows. A few days ago some seven children under the prescribed age of ten years were found to be employed at the Prince of Wales's Theatre, Greenwich. Their duties, indeed, were not heavy, but they were such as to interfere for six weeks with school attendance. Other theatres, it is said, have in the same way engaged a much larger number of school children. It may be argued that their doing this is profitable to the pleasure-seeker and to their own parents. This we do not deny. It does not appear, however, that the young performers themselves are equally benefited. The question is virtually one of money against education, and the child actor is not in any case the chief gainer by the transaction. At an age when his proper duty is to learn he is drafted off to an atmosphere totally different from that of school. It is out of the question that he should at the same time attend school with any appreciable profit. Even if he could do so, his divided and onerous tasks would in most cases impose a dangerous double strain, both mental and physical—at all events, where the theatrical work was daily carried on. He must therefore act at the expense of his ordinary education. As a rule, he must also live the while an unwholesome life of late hours, close air, and excitement. In the circumstances, and in view of the fact that children over ten years of age are eligible for theatrical work, we can see no injustice in the legal restriction imposed in such cases, or in the very moderate fine of one guinea imposed in the instance we have quoted.

SIGNOR CARLO PELLIGRINI.

BY the death of Signor Carlo Pelligrini we have lost probably the most brilliant foreign caricaturist that has ever visited this country. A Neapolitan by birth and an Italian in all his thoughts and feelings, he came to England some twenty years ago. The public very soon became familiarised with his brilliant caricatures in *Vanity Fair* of the best known men of the day in politics, literature, the arts, sciences, and general society. The medical profession will take an interest in his career, now unhappily cut short, not only on account of his drawings of the physicians and surgeons who have been and are eminent in their day, but also because he possessed in the most remarkable degree the ability to draw a likeness or caricature from memory of a person whom he had perhaps seen for only a few minutes. As an instance of this peculiar power may be mentioned that one of the best caricatures he ever executed was that of a distinguished diplomatist, who, being attached to a foreign Court, and attracting considerable attention at the time, was in London for a few days. Having been requested to make a drawing of this gentleman, the only opportunity which Signor Pelligrini could obtain of seeing him was whilst he was standing in conversation with someone for a few minutes in the Park. Although he had not been previously familiar with his appearance, this was quite enough to enable the artist to draw, after his return home, one of the most characteristic cartoons that he has ever done. The first member of our own profession to be delineated by his facile pencil was Sir William Fergusson; and amongst the best-remembered cartoons will be those of Sir William Jenner, Sir James Paget, Sir William Gull, and Sir Henry Thompson. The last drawing which he made for *Vanity Fair* before his fatal illness was of Sir William Dalby.

SICK NURSING FOR THE POOR.

ARRANGEMENTS for nursing the sick poor in their own homes constitute one of the most needful and meritorious projects of our time. This movement, which we have before had pleasure in advocating, is already well established at different centres throughout the country. In connexion with one of these, Lord Lorne has lately discussed the subject with considerable discrimination. The Glasgow Association, at the annual meeting of which he presided, employs a staff partly of trained, partly of untrained workers, the latter being under the supervision of the former. It also provides, in addition to those occupied in its charitable work, a separate staff for attendance on more remunerative patients. These are, so to speak, its breadwinners, and prevent it from being wholly dependent on public subscriptions. Both of these provisions are calculated to strengthen the influence of the Society; and the first mentioned need not, if carefully administered, impair the due discipline and

efficiency of the nurses engaged. His lordship very properly emphasised the importance of thorough education, including of course a term of hospital attendance in the case of the regular nursing staff. He also did well to inquire as to the class of patients included among the "poor," for whom the services of the visiting nurses were intended. The reply given—namely, that they were such persons as could not accommodate the nurse in their houses, or pay fees higher than a maximum of ten shillings a week—is somewhat vague. We should feel more enlightened by some definite statement as to the limit of income in the case of these beneficiaries. It would be mistaken kindness to allow the skill of a trained nurse to be used at a minimum cost by well-to-do persons *in formâ pauperis* on their own estimate of what they should pay. Restricted to the poor, and proportioned to their income, the help afforded in sickness by the Association supplies a want which for long was suffered without complaint, and which in some respects seems to have been met with particular exactitude. We do not hesitate to say that work such as theirs, whatever the area of its activity, is well worthy of public approval and support.

SIR JOHN KIRK, M.D.

FEW Europeans have been able to exert such vast influence over the savage and semi-savage tribes of Africa as Sir John Kirk, formerly surgeon, and subsequently for a long period Consul and Consul-General at Zanzibar. Since his retirement from the troubled politics of East Africa, many and serious difficulties have arisen, and the Government has very properly turned to its old and trusted servant, who, though living in comfortable retirement in a beautiful locality in Kent, and though we believe only recently recovered from a serious accident, has willingly consented to go out again to Zanzibar in the hope of being able to throw oil on the troubled waters. Let us hope that he will prove as successful in this enterprise as he was in his great expedition with Livingstone, and in his attempts to suppress, or at least to minimise, the East African slave trade. Sir John Kirk left England on the 17th, and so is now well on his way.

ACROMEGALIA.

OUR Berlin correspondent sends us the following account of a remarkable case:—"An extremely rare and interesting case of acromegalia, or abnormal development of the extremities, was exhibited by Professor Virchow in the Berlin Medical Society on the 16th inst., in the person of a Westphalian truckman of gigantic dimensions and herculean strength, who can carry 8 cwt. on his back with ease. His head is the largest Virchow has ever seen, the circumference of his skull being 65·5 and its length 22·9 centimetres. His height is 183·8 centimetres. He has six children, and is in excellent health. In the course of the demonstration Virchow disputed the opinion of Professor Freund, of Strasburg, and other observers, that acromegalia is connected with puberty, and is inclined to the belief that it is hereditary."

MEDICAL ADMINISTRATION OF WORKHOUSE INFIRMARIES.

WE fear that a somewhat dangerous experiment is about to be made by the workhouse committee of the Liverpool Select Vestry. That body has long been adding to its poor-law functions those of a sanitary authority, in so far as the isolation of the infectious sick is concerned, and the result has been overcrowding, with the necessarily resulting injury to the patients. The actual condition of the crisis that has been reached is not very clear, but one member of the committee speaks of the crowded state of the hospital as "simply cruel." Some remedy must be found, and hence it has been decided to give relief to the general hospital to the extent of 120 beds, and this is to be done by allotting two floors of the "fever hospital" to general medical cases; this experiment to be accompanied by what is termed an effectual cutting off of these two floors from the other floors. It is alleged that this is done under medical advice, and the step may perhaps be the least mischievous that can be thought of to meet an existing emergency; but it is one which is none the less opposed to all modern experience as to the influence of infectious hospitals, and it is certainly altogether wrong in principle. If harm results, the workhouse committee will probably be blamed.

HARVEIAN SOCIETY OF LONDON.

THE annual general meeting and conversazione of the Harveian Society of London was held at the Marlborough Rooms on Jan. 17th. The following gentlemen were elected office-bearers for the ensuing year:—President: Thomas Buzzard, M.D., F.R.C.P. Vice-Presidents: F. H. Champneys, M.B.; William Eward, M.D.; R. S. Mair, M.D.; Herbert Page. Treasurer: G. P. Field. Hon. Secs.: C. B. Lockwood; Robert Maguire, M.D. Council: E. Clifford Beale, G. Anderson Critchett, J. H. Drew, J. Hughlings Jackson, M.D., F.R.S., M. Handfield Jones, M.D., J. Ernest Lane, David Lees, M.D., Stephen Mackenzie, M.D., G. Everitt Norton, Edmund Owen, William Sedgwick, and Frederick Treves. The retiring President, Mr. William Sedgwick, delivered an eloquent address (which we hope to publish in a future number), and afterwards a conversazione was held. Dr. Arthur Evershed recited two Shakspearian scenes, songs were sung by Dr. W. A. Aikins and others, and a banjo orchestra gave selections of popular music during the evening. There was also an exhibition of photographs of medical celebrities, surgical instruments, and various electric appliances.

MEDICAL LONDON COUNTY COUNCILLORS.

FIVE medical men succeeded in being returned for the new London County Council, so that the interests of the medical profession may be expected to be well looked after. In two cases—viz., those of Mr. Gibson Bott and Mr. Cooper—the distinction was enjoyed of being returned at the head of the poll. The following are the names of the five medical gentlemen returned, together with their constituencies:—

Islington (*West*).—R. Brudenell Carter, F.R.C.S., L.S.A.
Newington (*West*).—W. G. Bott, L.R.C.P. Ed., M.R.C.S.
Paddington (*North*).—Edward Parker Young, M.R.C.S., L.S.A.
Southwark (*Bermondsey*).—G. J. Cooper, M.R.C.S., L.S.A.
Wandsworth.—G. Blundell Longstaff, M.A., M.B. Oxon., F.R.C.P. Lond., M.R.C.S.

THIRD CONGRESS OF RUSSIAN MEDICAL MEN.

THE third congress of Russian medical men has just been held at St. Petersburg, and seems to have been the most successful of all, no less than 1500 members being present; whereas last year at Moscow the numbers were only 1000. In the congress of 1887, which was held at St. Petersburg, there were about 500 present. Professor Botkin opened the proceedings with an address of welcome. The new president and secretary were then elected, the choice falling on Dr. Erisman, Professor of Hygiene in Moscow, for president, and on Dr. Uvaroff Zemstro, medical officer of the province of Kherson, for secretary. Papers of considerable interest were read, a notice of some of which we shall hope to give in future numbers of THE LANCET.

THE ESTIMATION OF ALBUMEN IN URINE.

A. CHRISTENSEN of Copenhagen describes a new method for the rapid estimation of the amount of albumen in urine, which he claims to be more accurate than Esbach's method (*Virch. Arch.*, 115, Hft. 1). The latter plan, consisting merely in the complete precipitation of the albumen by picric acid and the use of a tube so graduated that the depth of the deposit at the end of twenty-four hours indicates so many grammes of albumen per litre of urine, was found by Christensen and Mygge to be very variable in its results when compared with those of coagulation by heat and nitric acid, the variability being in part accounted for by the influence of very slight changes in temperature and the extent to which the precipitated albumen would "settle." The proposal of M. Christensen consists in the use of tannic acid as the precipitant, and the suspension of the precipitate by the addition to the urine of mucilage. This mixture is then, after being diluted with water, poured into a vessel of a certain capacity, which is placed over a white surface on which black lines are drawn. The amount of the "emulsified" urine necessary to obscure the lines will be in inverse ratio to the quantity of albumen in the urine—a quantity easily estimated by the employment of a suitably graduated curette. The principle is the same as that introduced by Panum for the determination of the quantity of cream in milk, and can no doubt be readily made available for clinical work. The results obtained by this method in many cases are given by M. Christensen, and compared with similar results by M. Mygge and with estimations by coagulation. So far as can be gathered from the tables given, the advantage of this plan over that of Esbach (a far simpler method) does not seem very great. Neither plan is quite accurate.

REMOVAL OF ENTIRE UPPER EXTREMITY WITH PART OF CLAVICLE.

LAST Monday Mr. Chavasse removed, at the Birmingham General Hospital, the entire right upper extremity, with the outer two-thirds of the clavicle, of a man aged forty. The operation was performed after the method of Paul Berger, slightly modified as to the manner of securing the vessels, and was undertaken on account of an enormous osteo-chondro-sarcoma, springing, originally, from the upper end of the humerus. The tumour was first noticed ten years ago, but latterly had rapidly increased in size. The patient rallied well from the operation, and is making satisfactory progress.

FOREIGN UNIVERSITY INTELLIGENCE.

Bologna.—Professor Poggi has been appointed to the chair of Surgical Pathology.

Buda-Pesth.—The chair of Medicine has been offered to Professor Karl Kéthy; that of Pharmacology has been filled by the appointment of Dr. A. Högyes, Professor of Pathology, who, it is expected, will himself be replaced by Professor Bókai of Klausenburg. The selection for the Professorship of Anatomy is as follows: 1. Dr. A. Tözök, Professor of Anthropology. 2. Dr. Thanhoffer, Professor in the Veterinary Institute. 3. Dr. Leo Davida, Professor of Anatomy in Klausenburg.

Graz.—Dr. Birnbacher has been appointed Extraordinary Professor of Ophthalmology.

Heidelberg.—Dr. Steiner, Extraordinary Professor of Physiology, has resigned his post, proposing to reside in Cologne.

Jena.—The Medical Clinic has been given in charge to Dr. Vierordt of Leipsic.

Leipsic.—Dr. Beneke has qualified as *privat-docent* in Pathological Anatomy.

Lund.—Dr. C. M. Fürst has been appointed Extraordinary Professor of Anatomy and Histology.

Turin.—Dr. Gradenigo, jun., has been invited from Padua as Lecturer in Otology.

Vienna.—It is probable that a third Medical Clinic will be established and given to Professor Schrötter. Professor Schrott, who died recently, left £8000 to found a pension fund for the relief of poor persons who had lost an arm or a foot.

DEATHS OF EMINENT FOREIGN MEDICAL MEN.

THE deaths of the following eminent foreign medical men are announced:—Dr. Don Francisco de P. Folch y Amich, formerly Professor of Pathology in the Medical School of Barcelona, a post which he held for about fifty years. He died in Barcelona at the age of eighty-nine.—Dr. Vandevivière, a well-known alienist and President of the Belgian Society of Mental Medicine.

THE *Medical Record* (New York) for Jan. 12th cites the following from the *Weekly Medical News*:—"The recent death in Georgia of Dr. J. B. Manson, one of the most eminent, skilful, and benevolent physicians of that State, at the hands of an infuriated father, whose child died from typhoid fever while under the care of Dr. Manson, draws attention to one of the many dangers which surround a doctor. Ill-balanced minds, under the pressure of great grief, often unjustly blame the attending physician for the death of their loved one; but, fortunately, it is rare for the result to be so sad as the one above referred to."

THE deplorable state into which the sanitary service of Sicily has been allowed to lapse was one of the chief motives for the tour of inspection just made throughout the island by Signor Boselli, the Minister of Public Instruction. His Excellency found the medical schools, in particular, from Palermo to Messina and Catania in sad conditions of neglect and non-equipment; while the hospitals were as unfit for the tuition of the student as they were for the wants of the community. The Sicilian deputies of all political shades will support Signor Boselli in carrying the sorely needed reforms through Parliament.

A SPECIAL volume on the yellow fever epidemic of 1888 is, we learn from the *Journal of the American Medical Association*, in preparation by the Surgeon-General of the Marine Hospital Service. It will contain reports of the epidemic at various naval and other stations, together with a report by Drs. Guiteras, Faget, and Mitchell on the diagnosis and treatment of yellow fever.

THE King of Greece has conferred on M. Pasteur the Grand Cross of the Saviour, the highest Greek Order. M. Grancher, the director of the Pasteur Institute, and Dr. Roux and Dr. J. Guyon, doctors of that establishment, are made Commanders of the same Order.

DR. ROBERT MAGUIRE, of St. Mary's Hospital, has been elected Assistant Physician to the Hospital for Consumption and Diseases of the Chest, Brompton, consequent upon the vacancy created by the appointment of Dr. T. Henry Green to the post of physician.

PROFESSOR CORFIELD has just been elected an Honorary Member, and Dr. Louis Parkes a Foreign Associate, of the Société Française d'Hygiène.

Pharmacology and Therapeutics.

CHLORIDE OF METHYL SPRAY IN NEURALGIA.

SINCE Dr. Debove[1] showed how valuable the spray of liquefied chloride of methyl gas was in the topical treatment of various neuralgias, the literature of the subject has grown considerably, and many cases of cure resulting from the application of the spray to the skin over the neuralgic area have been recorded.[2] The gas, however, had to be liquefied by pressure, and the cylinders containing it were bulky and complicated. Galante et Fils, of Paris, have lately made for Dr. Debove (Feb. 1888) a small portable cylinder which has brought the method into general use in France. The cylinder is represented in the engraving, and the reader will notice that by turning a milled headed screw at the bottom of the apparatus a fine spray jets out from an aperture just above it. This spray can be regulated to a nicety by the screw. A correspondent, who has recently tested the method (the charged cylinders being courteously supplied by Messrs. Christy and Co., of Lime-street), reports that he has employed it in over fifty cases with the following result: "The action of the spray upon the skin is remarkable. Such intense cold is instantaneously developed that, directly the chloride of methyl touches the skin, the latter becomes hard, iced-white, and frozen. At the same time the patient feels as if he had been

touched with a hot iron. Two seconds, or at the most five, are quite long enough for its application to any one patch of skin, for the skin will rapidly vesicate, and even become gangrenous, if the spray is continued for a longer period. It is better to play the spray *obliquely* over the skin, letting it glance off, rather than direct it straight at and in close proximity to the part. It has been used in France for extracting teeth painlessly, also in minor operations for local anæsthesia, and is recommended for trigeminal neuralgia. Concerning the last, I would at once dissuade others from using it upon the face, for the application leaves a most disfiguring brown colouration, which takes a long time to fade. Of its value in the treatment of neuralgia there is no question. I have taken fifty cases of various neuralgias of the neck, back, testicle, urethra, and legs, and have relieved many temporarily and some permanently by its use. It is a rapid and effective vesicant, and has proved of value as a substitute for the often useful plan of 'firing' joints. As a 'moral' force in neuromimesis and malingering it will doubtless be most persuasive."

GRANULAR EFFERVESCENT PREPARATIONS.

A granular effervescent preparation of antipyrin has been made by Hooper and Co. The dose is one teaspoonful of the granules in water three or four times a day. It would be advisable to state on the label the number of grains of antipyrin to the drachm of the granules. The specimen forwarded to us formed an agreeable effervescing draught. It is convenient for administration in cases of "bilious" and nervous headaches and for sea-sickness. Mr. Alfred Bishop, of Mile-end New Town, has prepared two strengths of a granular effervescent form of antipyrin; one containing five and the other ten grains to the drachm of the preparation. Mr. Bishop has also sent a good sample of the granular effervescent citrate of caffeine containing one grain of the salt to a drachm of the preparation. We can commend all these articles; their purity is undeniable; they retain their strength unimpaired provided care be taken to keep the bottles tightly corked.

LIQUOR COPAIBÆ, CUBEB, BUCHU, ET MATICO.

This preparation is prepared by Thomas Hopkinson and Co. of Nottingham, and is a judicious combination of drugs having a well-known action on the mucous membranes, especially of the genito-urinary tract. The combination is so prepared as to be miscible at any time with water. The dose is sixty minims in a wineglassful of water. The specimen, we learn, was employed with good effect in a case of gonorrhœa and slight cystitis.

[1] Soc. Méd. des Hôp., Aug. 1884.

[2] Vinay: Lyon Médical, 1885, p. 350 (twenty-one cases, with seventeen cures). Peyronnet: Thèse de Paris, 1886. Vinard: Gaz. Méd. de Nantes, 1885. Also, Robin, Rendu, Letulle, Sacre, Nerval, Tenneson, and Béque, and many others.

THE "ELECTROPATHIC AND ZANDER INSTITUTE": A PROTEST.

OUR attention has been drawn to an impudent misuse which is being made by a self-styled medical electrician of some remarks which we passed nearly eight years ago upon Dr. Zander's system. At that time an institution in Soho-square, having been fitted with Dr. Zander's very ingenious gymnastic apparatus, was at work under the control and direction either of Dr. Zander himself or of his responsible and accredited agent. Properly used, we thought that these appliances might prove valuable curative agents in suitable cases, and accordingly we did not hesitate to extend a personal welcome to Dr. Zander, and to speak in the language of guarded appreciation of his work. It now appears that the apparatus has been acquired by a Company, which is identified, in the public eye at least, with a person of whom we know nothing at all except that he is an unsparing advertiser. He appears, from a circular which has reached us, to have superadded Dr. Zander's gymnasium to his own galvanic plant, and to have imparted to the whole miscellaneous aggregate the solidarity of a collective name. This perhaps is no more than might have been expected from an adept in the art of advertisement. But we should have thought that even he would hesitate to appropriate the comments which we made so many years since upon the institution in Soho-square when under Dr. Zander's personal supervision. It is, then, with the greatest surprise and no little indignation that we find a testimonial endorsed upon his circular which purports to have been extracted from our pages. We give below the extract in question, and, *in extenso*, the article from which it is a garbled quotation:—

From the Circular above mentioned.

Short extract from THE LANCET, which in a recent THREE-PAGE ARTICLE on *Mechanico-Therapeutics*, says: "We have been favoured with an inspection of the principal machines in action at the London Zander Institute, and were quite prepared to learn that they are very beneficial in cases where passive exercise or various kinds of mechanical pressure are indicated. One machine

From THE LANCET *of Dec. 17th, 1881.*

Mechanico-Therapeutics.—Our readers may remember that on May 28th we published an account of Dr. Zander's system of treating various diseases, internal and external, partly or chiefly by the use of machines applicable to various parts of the body, and producing various movements or sensations by which circulation and muscular action were both stimulated. The account was in

in particular appeared to us no bad substitute for horse exercise, and would, with other apparatus, be available in many cases of atonic intestines, where horse exercise might be impracticable. *The great advantage of the Mechanical Exercise is the power of finely graduating the force of the machines in the use of the muscular power so necessary when employed as a therapeutic agent.* This system of medico-therapeutics is most valuable in *spinal disease*, in *heart diseases*, in *stiffness of joints, intestinal atony* and *constipation, nervous palpitations, defective chest expansion*, &c. Its promoters are sparing no pains or expense to make it a very promising addition to therapeutics, and WE ADVISE OUR READERS TO PAY AN EARLY VISIT TO THE INSTITUTION."

the form of a paper by Dr. T. Gilbart Smith, read before the Medical Society of London. Dr. Zander has practised this system in Stockholm for sixteen years; and, according to varied testimony, with much success. It is a gymnastic system, in which, as in so many other directions, human work is replaced by the work of a machine. The machines used by Zander number between fifty and sixty. Some of them are worked by an engine, others are worked by the patient himself. A company, entitled the Zander Medico-Gymnastic Company (Limited), has been established for the purpose of supplying London with these mechanical appliances, as well as with skilled advice in the use of them. The institution is at 7, Soho-square, and already fifty or sixty machines are erected, of the greatest ingenuity and niceness. Dr. Zander, though only recovering from a severe attack of typhoid, is expected in London shortly, or has already arrived, and will be glad to explain to members of the profession the principles on which he acts, and the machines which he has, with marvellous genius, invented to carry them out. We have been favoured by Mr. Oxley, who is in medical charge of the establishment here, with an inspection of the principal machines in action, and were quite prepared to learn that they are very beneficial in many cases where passive exercise or various kinds of mechanical pressure are indicated. One machine, in particular, appeared to us no bad substitute for horse exercise, and would, with other apparatus, be available in many cases of atonic intestines, where horse exercise might be impracticable. The great advantage of the system is the power of finely graduating the force of the machines in adaptation to the strength of the patient, and of producing that slow and gradual increase in the use of the muscular power so necessary when employed as a therapeutic agent. The system of medico-therapeutics is said to be most valuable in spinal disease, in heart diseases, in stiffness of joints, intestinal atony and constipation, nervous palpitations, defective chest expansion, &c. The system is quite untried in this country, but its promoters are sparing no pains to make it a very promising addition to therapeutics, and we advise our readers to pay an early visit to the institution.

It is of a piece with the misappropriation of these passages, which are not even accurately quoted, that an annotation occupying three-quarters of a column should be referred to as a "three-page leading article." But this, though a glaring inaccuracy, is a comparatively venial one. Our readers will readily believe that we have never written a single word in favour of "electropathic belts" or other quackery of that description. We prefer, as a rule, to treat such things with the silent contempt which they merit; but when language which we have used a long time ago is tortured into the semblance of a recent testimonial, we have no choice but to repudiate the misrepresentation in the most unmistakable language at our command. The terms we admit; but the application no longer holds when for Dr. Zander's system, under Dr. Zander's supervision, are substituted the vagaries of a "medical electrician," who does not shrink from manufacturing testimonials in the manner exemplified above.

NORFOLK AND NORWICH EYE INFIRMARY.—The Mayor presided at the annual general meeting held on the 18th inst. The medical officer's report stated that 641 fresh patients had been admitted during the year, of whom 159 were in-patients and 482 out-patients. The financial statement of the committee showed a balance in hand of £131 0*s.* 8*d.*

MEDICAL INSTITUTE, GLASGOW.

FOR the following remarks we are indebted to Professor Matthew Charteris, of Glasgow.

"This institute was established in June last to enable senior students of the Glasgow University to visit and prescribe for the sick poor in the Anderston district of the city, which is within half a mile of the University. The result has been very satisfactory. The average number of the cases is from fifteen to eighteen weekly, and the attendance on each of these cases implies generally six visits. The medicines ordered are dispensed by a qualified chemist, and are obtained free. When necessary, adjuncts to treatment, as beef-tea, are also given. Each student has a prescription-book, and this is carefully examined weekly by me, along with a written report of the cases visited. In all doubtful and dangerous cases a consulting physician or surgeon attached to the institute is called in, and arrangements are made by which every case is visited weekly by one of the staff. The diseases seen are those which occur in the round of daily practice. As an example, the record of a case of typhlitis is given:—

"*Typhlitis treated by opium; recovery.*—The patient, J. S——, aged twenty-eight, a labourer, was early in the morning of Nov. 8th seized by a sudden and severe pain in the right iliac region, and this was followed by nausea and vomiting. The pain increased during the day, and when the patient was visited by Messrs. Clark and Gray, they detected fulness in the region mentioned, the slightest touch on which occasioned pain. The temperature was 101° F. The diagnosis being clear, the patient was ordered to remain in bed, to have only sloppy food, to take a pill containing half a grain of opium every four hours, and to have hot local applications. In the course of twenty-four hours the pain diminished, but the swelling rather increased, and only on the third day of the attack did this commence slowly to subside. The opium pill was now given only at night. On the ninth day the bowels were moved for the first time by a dose of castor oil, and on Nov. 20th the patient had made a complete recovery."

THE EPIDEMIC OF MEASLES IN THE POTTERY TOWNS.

(From a Correspondent.)

THIS epidemic of measles began in Hanley in September. During that month there were two deaths, then it rapidly spread, and in October there were no less than 58, in November 73, and in December 50; making a total of 183 deaths in four months, or 161 in the fourth quarter of the year ending Dec. 31st; but the most remarkable fact is how the disease has spread in a complete circle, beginning in Shelton, extending to Joiner's-square, then on to Northwood, and then to Chapel-fields, in the centre of the town. No doubt it has been carried about by a great deal of visiting of the parents of children, as there is little doubt that the contagion of measles can be carried a great deal further in the clothes than that of scarlatina or small-pox. Again, the atmosphere has had some influence, as every town in the neighbourhood—Fenton, Longton, and Burslem—has suffered from this disease, and the fatality has been quite as high as in Hanley. Now it is reported that it is rubeola or rötheln, and not ordinary morbilli or measles. Some of the medical men state that they have had true cases of rötheln. As yet I have only seen one pure case, but the variety of measles prevalent has been of a peculiar type. It may truly be said that it is, as Darwin states, "the survival of the fittest." Those weakly scrofulous children born of unhealthy parents have begun the disease with a slight cough; then after two or three days convulsions have supervened; if medical aid is called in, and the child has a wet pack or a warm bath, the peculiar eruption comes out, but with a dark, mottled, large-sized papilla, and the child succumbs to head mischief. The disease now prevalent begins with an ordinary high temperature, ranging from 100° to 103°, but there is not the intolerance of light that is experienced in some epidemics.

The catarrhal symptoms are very severe, often running on to pneumonia; but if this does not occur when the eruption subsides, a peculiar croupy cough with stridulous breathing comes on, and many children have died from laryngitis. In some of these cases I have seen great benefit from mopping the pharynx and epiglottis with glycerine of tannin, with large doses of chlorate of potassium, combined with nitrate of potassium. Where the laryngeal symptoms have been neglected, these children have died. No doubt many deaths have taken place in poor families where they thought they could treat an ordinary case of measles with domestic remedies; consequently, when medical aid has been called in, the child has been moribund or in a hopeless condition. Some cases have run an ordinary course, and at the end of a week or ten days partial paralysis of the arm has come on. I have not seen such a case myself, but two medical men in the town have had cases.

Altogether, the disease now prevalent must be considered a peculiar one of a severe type, but it is noticeable by every medical man that no two epidemics have the same sequelæ or premonitory symptoms exactly alike. Certainly this district has never been visited by an epidemic of measles extending so far, or to such a wide extent, or so fatal in its character. From information received, there was an epidemic of measles in the town in 1879, and only 78 deaths in the whole year; in 1883 there were 52; in 1885, 54 deaths from the same disease. The present epidemic is gradually dying out, though extending to the country districts around—viz., Milton, Bagnell, Endon, Smallthorne; but the fatality is not so great, as the parents of the children are more careful, exercise greater caution, secure medical aid sooner, and pay greater attention to nursing the little patients, in consequence of the great mortality that has taken place.

AIDS TO AUTHORS AND CLINICAL OBSERVERS.

NOTWITHSTANDING the number of papers and books of a medical character which are constantly issuing from the press, it is probable that a large number of really important observations and thoughts based upon extensive clinical experience are entirely lost to the profession simply because the observers are too busy with practice and too much in need of entire rest, during any times of freedom from professional work they may have, to undertake the labour of writing out the results of their observations. Therefore any mechanical aid that can facilitate the recording of observations or thoughts will certainly be hailed as a boon by many medical men. By the courtesy of one of the now somewhat numerous ladies who preside over type-writing offices, we have just had an opportunity of learning something of two of the more novel of these aids, the Graphophone and Stenotyp, or typo-shorthand. The principle of the graphophone has been frequently described in the daily press. This instrument is very similar to the phonograph, but simpler. It requires to be worked by a treadle, like a sewing-machine. By speaking or singing into a funnel-shaped mouthpiece, a complete record of the speech or song is obtained on a cylinder of cardboard coated with wax. This cylinder can be sent by post to, say, a type-writing office, where it is attached to another graphophone, which gives out what is supposed to be a facsimile of the original speech or song, by means of tubes like those of a binaural stethoscope fitting into the ear of the operator who proceeds to take down what is thus dictated on the type-writer. To some extent this may certainly be done; but we are bound to say that, so far as our observation went, the dictation through the machine was not nearly distinct enough to enable a listener to take down unfamiliar technical matter with any approach to accuracy. There is, too, a continual buzzing noise which is not pleasant, and which greatly obscures the sounds of the voice. It is possible that with practice one might learn to speak into the machine in such a way that none of the small words or short syllables might be lost to the ear of the operator; also that in time one might get used to the buzzing. These machines are not, it appears, for sale at present, but they can be hired for a very moderate sum, and the cost of the recording cylinders is scarcely more than that of good manuscript paper. From what has been said, it will be seen that the instrument does not possess a sufficient amount of delicacy to enable it to record heart or lung sounds with complete accuracy. So that the idea of sending records of doubtful cardiac bruits, for example, to a consultant at a distance must, we fear, be abandoned until considerable advances are made in the perfecting of the machine.

Regarding the other time-saving novelty—the stenotyp—no details are published, as the system of shorthand (for such it practically is) is a secret between the inventor and any persons who may take lessons from him. The general principle, however, is that all the signs are either letters, figures, or marks of punctuation. They can be written by hand or typed with a type-writer; and Mr. Guest, the inventor, states that words, instead of requiring about 5 letters each, average only 1·5 letters or signs; also that they can be unfailingly transcribed by any person who knows the system. Thus we saw a very little boy read off quite easily some matter which had been written with a pencil. This would seem, at first sight at least, to offer a great advantage to students and practitioners in enabling them to take rapid notes perfectly readable long afterwards. It is claimed also that this system is far easier to learn than other shorthand systems.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 6274 births and 4011 deaths were registered during the week ending Jan. 19th. The annual rate of mortality in these towns, which had been 22·7 and 25·5 per 1000 in the preceding two weeks, declined last week to 21·9. During the first three weeks of the current quarter the death-rate in these towns averaged 23·4 per 1000, and was 0·6 below the mean rate in the corresponding periods of the ten years 1879-88. The lowest rates in these towns last week were 11·5 in Hull, 15·6 in Leicester, 15·9 in Derby, and 16·2 in Nottingham. The rates ranged upwards in the other towns to 27·5 in Liverpool, 28·2 in Oldham, 33·8 in Cardiff, and 34·9 in Blackburn. The deaths referred to the principal zymotic diseases, which had been 618 and 641 in the previous two weeks, declined last week to 569; they included 293 from measles, 98 from whooping-cough, 63 from scarlet fever, 57 from diphtheria, 31 from diarrhœa, 27 from "fever" (principally enteric), and not one from small-pox. No death from any of these zymotic diseases was recorded in Hull or in Wolverhampton, while they caused the highest death-rates in Cardiff, Salford, Oldham, and Blackburn. The greatest mortality from measles occurred in Cardiff, Liverpool, Oldham, Salford, Huddersfield, and Blackburn; from whooping-cough in Cardiff, Birmingham, and Preston; and from scarlet fever in Sheffield, Manchester, Blackburn, and Oldham. The 57 deaths from diphtheria in the twenty-eight towns included 38 in London, 4 in Manchester, 3 in Liverpool, 2 in Salford, 2 in Oldham, and 2 in Portsmouth. No death from small-pox was registered in any of the twenty-eight great towns; and no small-pox patient was under treatment during the week in the Metropolitan Asylum Hospitals, and only one in the Highgate Small-pox Hospital. The number of scarlet-fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital was 687, against numbers declining in the preceding nine weeks from 980 to 693; 51 new cases were admitted during the week, the numbers in the previous two weeks having been 60 and 41. The deaths referred to diseases of the respiratory organs in London, which had been 412, 484, and 652 in the previous three weeks, declined last week to 492, and were 74 below the corrected average. The causes of 67, or 1·6 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Newcastle-upon-Tyne, Sunderland, Leicester, and in eight other smaller towns. The largest proportions of uncertified deaths were registered in Halifax, Salford, and Oldham.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased in the preceding five weeks from 19·3 to 24·1 per 1000, declined again to 22·0 in the week ending Jan. 19th; this rate was 0·1 above the mean rate during

the week in the twenty-eight large English towns. The rates in these Scotch towns ranged from 13·6 and 17·8 in Leith and Dundee to 26·7 in Glasgow and 30·8 in Paisley. The 563 deaths in the eight towns showed a decline of 80 from the number returned in the previous week, and included 16 which were referred to whooping-cough, 14 to measles, 12 to diarrhœa, 10 to diphtheria, 7 to "fever" (principally enteric), 4 to scarlet fever, and 1 to small-pox; in all, 64 deaths resulted from these principal zymotic diseases, against 50 and 65 in the preceding two weeks. These 64 deaths were equal to an annual rate of 2·5 per 1000, which was 0·8 below the mean rate from the same diseases in the twenty-eight English towns. The fatal cases of whooping-cough, which had been 16 and 15 in the preceding two weeks, rose again last week to 16, and included 12 in Glasgow and 2 in Aberdeen. The 14 deaths from measles showed a decline of 3 from the number in the previous week; 10 occurred in Glasgow and 2 in Paisley. The 12 deaths attributed to diarrhœa did not materially differ from the number in the previous week, or from that in the corresponding week of last year. The 10 fatal cases of diphtheria, within one of the number in the previous week, included 6 in Glasgow and 3 in Greenock. Of the 7 deaths from "fever," 2 occurred in Glasgow, 2 in Edinburgh, and 2 in Greenock. All the 4 deaths from scarlet fever were returned in Glasgow, and the fatal case of small-pox in Greenock. The deaths referred to the principal diseases of the respiratory organs, which had been 95, 140, and 146 in the previous three weeks, further rose last week to 156, and were one above the number in the corresponding week of last year. The causes of 63, or more than 11 per cent., of the deaths registered during the week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 31·3 and 30·2 per 1000 in the preceding two weeks, rose again to 31·5 in the week ending Jan. 19th. During the first three weeks of the current quarter the death-rate in the city averaged 31·0 per 1000, the mean rate during the same period being 22·5 in London and 18·8 in Edinburgh. The 213 deaths in Dublin showed an increase of 9 upon the number in the previous week; they included 3 which were referred to "fever" (typhus, enteric, or ill-defined), 3 to scarlet fever, 3 to whooping-cough, 1 to diarrhœa, and not one either to small-pox, measles, or diphtheria. Thus the deaths from these principal zymotic diseases, which had been 12 and 16 in the previous two weeks, declined last week to 10; they were equal to an annual rate of 1·5 per 1000, the rate from the same diseases being 2·8 in London and 1·0 in Edinburgh. The fatal cases of scarlet fever and whooping-cough corresponded with those in the previous week, while the deaths from "fever" and diarrhœa had declined. Four inquest cases and 3 deaths from violence were registered; and 75, or more than a third, of the deaths occurred in public institutions. The causes of 16, or nearly 8 per cent., of the deaths in the city were not certified.

THE SERVICES.

WE are asked to state that, consequent upon the renumbering of Victoria-street, S.W., the address of the Army Medical Department is now 18, Victoria-street, Westminster, S.W.

Surgeon-Major M. Cogan, Army Medical Staff, having returned to England from Gibraltar on reduction of establishment, has been selected for the charge of the Station Hospital at Colchester.

VOLUNTEER AMBULANCE CLASS INSPECTION.—Surgeon-Major Rowe, M.S., attended by Surgeon W. Raw, V.M. Staff Corps, inspected the 5th Regimental Ambulance Class of the 4th Volunteer Battalion, East Surrey Regiment (7th Surrey Rifles), on Saturday, the 19th inst., at the headquarters of the regiment. The class numbered twenty members, under the command of Surgeon E. J. Lawless, M.D., the instructor and surgeon of the battalion. After a parade of over two hours' duration, the inspecting officer addressed the men, and said that it would give him much pleasure to send in a favourable report to the War Office, and to recommend every man of the class for a regimental bearer certificate.

ARMY MEDICAL STAFF.—Surgeon-Major Thomas Wilson Jackson, M.B., is granted retired pay (dated Jan. 23rd, 1889).

ADMIRALTY.—The date of retirement of Surgeon James Baillie Armstrong is Dec. 25th, 1888, and not Dec. 28th, 1888, as stated in the *London Gazette* of Jan. 11th, 1889.

The following appointment has been made:—Surgeon Frederick A. Trevan to the *Indus* (dated Jan. 18th, 1889).

VOLUNTEER CORPS. — 1st Volunteer Battalion, the Prince of Wales's Volunteers (South Lancashire Regiment): Surgeon E. Lister is granted the honorary rank of Surgeon-Major (dated Jan. 19th, 1889).—1st Volunteer Battalion, the King's (Shropshire Light Infantry): Acting Surgeon W. H. Packer, M.D., from the 1st Worcester Artillery Volunteer Corps, to be Acting Surgeon (dated Jan. 19th, 1889).

Correspondence.

"Audi alteram partem."

DURATION OF INCUBATION AND CONTAGIOUSNESS.

To the Editors of THE LANCET.

SIRS,—Ten years ago the Clinical Society of London appointed a committee to investigate the periods of incubation and of contagiousness of the commoner communicable diseases. A certain amount of valuable material was received, but it was thought desirable to defer the presentation of a report until further experience was available. The Society has now determined to gather additional information with a view to the preparation of an early report on the subject, and for this purpose has reconstituted the committee. The committee is desirous of obtaining particulars of cases which throw light upon the periods of incubation and contagiousness of the below-mentioned diseases, and will be grateful for notes of any cases where the facts can be ascertained with sufficient precision to afford grounds for conclusions.

It is thought that gentlemen practising at a distance from large centres of population, and especially those engaged in the public health service or associated with schools, would be able to supply information of the kind required. A single case in which the dates of exposure to infection and the appearance of the first symptom can be accurately fixed, especially where the exposure has been limited in duration, would be highly valued. The following diseases are included within the scope of the inquiry: Variola, varicella, measles, German measles, scarlet fever, typhus, relapsing fever, whooping-cough, diphtheria, enteric fever, cholera, erysipelas, mumps, and infectious sore throat. The committee consists of Dr. W. H. Broadbent, Dr. George Buchanan, Dr. Cayley, Dr. Thomas Barlow, Dr. Alfred Hill, Dr. Isambard Owen, Dr. Thorne Thorne, Dr. Alder Smith, and Mr. R. W. Parker, with Mr. Shirley Murphy, 41, Queen Anne-street, and Dr. Dawson Williams, 25, Old Burlington-street, W., as honorary secretaries, to one of whom communications should be addressed.

I am, Sirs, yours truly,

W. H. BROADBENT,
Clinical Society of London, Jan. 1889. Chairman of Committee.

"ECTOPIC PREGNANCY AND PELVIC HÆMATOCELE."

To the Editors of THE LANCET.

SIRS,—Most of the points upon which your reviewer expresses views adverse to my own are such as admit of legitimate differences of opinion—as, for instance, where he complains of my use of the term "placental sound." It is curious that he should quote the argument of ectopic pregnancy against me, for it is just the study of such cases that has convinced me that the sound is "placental." Your reviewer thinks otherwise, and with that opinion I have no reason to find fault; but he has no right to term my opinion on the subject "an inaccuracy," or condemn the phrase as being "obsolete." There are, however, a few points on which he has clearly misunderstood and misrepresented me, and I ask your indulgence to put him right. He clearly does not see that the development of the ovum in the broad

ligament leads to the production of the subperitoneal variety of ectopic gestation, as described by Hart and Carter, and these authors (page 91) claim their own observations as supporting my views. Again, your reviewer has entirely missed the point that Jessop's and Champneys' cases are the result of the secondary rupture of the broad ligament cyst into the peritoneum, a fact in the development of ectopic pregnancy that was fully established before I was born. On page 59 my views on this subject are given at length, and must have escaped the eye of your reviewer, or he never could have said that my opinion is directly contrary to the evidence of these two cases, and that my book in this respect bears marks of arbitrary disregard of even the facts I quote. He further says that Dr. Herman's critical and valuable paper is "dismissed with the contemptuous remark" &c. This is most unfair, for the conclusions of Dr. Herman's paper are given and adopted (p. 84) at full length as "practically fatal to vaginal section." A similar and almost as serious a misrepresentation occurs in the same paragraph, where it is said that "a similar sentiment occurs with regard to a paper by Dr. Champneys on Primary Laparotomy." I have indicated no such sentiment about this paper, which I quote largely as a valuable contribution. I point out that the blunder in the case was the non-performance of a second abdominal section immediately at the onset of the serious symptoms; and surely this is a perfectly legitimate criticism. If blunders are not to be pointed out, how are we to make progress? Your reviewer further says that my table of cases does not contain the evidence of tubal gestation, and that the evidence of tubal gestation being often obscure and the proof of its existence difficult, "we have therefore no independent means of judging of the value of the above statements." This is really an astonishing array of statements. The proof of tubal gestation after the tube has been removed by operation or at a post-mortem examination is as easy as possible; and the preparations obtained from every one of the cases given in the tables have been exhibited, and the details published in the records of the Birmingham Medical Societies or in the Transactions of the British Gynæcological Society. The table given in my book is merely for the purpose of the authentification of the cases, the nature of which has long since been placed beyond dispute. I did not consider it any more necessary to enter into such elementary details than to state, in the table or elsewhere, that each patient had been put under an anæsthetic before I operated. When an obstetrician publishes a table of statistics of cases of labour, surely it may be assumed that in each there were indisputable grounds for asserting that the products of conception had been displayed. Similarly, when a table of cases of operation for ruptured tubal pregnancy is published, it may be assumed that in every one satisfactory evidence was obtained of the presence of a fœtus and placenta, or of a placenta at least, without the necessity of a tedious recital of the fact. If it is not to be so, then medical literature, already rather a weariness to the flesh, will become a burden intolerable. If your reviewer has any honest doubt about the table or any of its details, let him make a specific challenge, and I am prepared to meet him with the specimens.

I am, Sirs, yours faithfully,

Birmingham, Jan. 21st, 1889. LAWSON TAIT.

*** Having submitted the above letter to our reviewer, we have received the following reply:—"I certainly thought that the 'placental' sound was an obsolete phrase, and that it was used by Mr. Tait (p. 67) as equivalent to the uterine sound or bruit. His observations on this matter are not known to me, and are apparently at variance with those of other observers. I do not understand his sentence beginning, 'He clearly does not see,' and refer him to the review (p. 128): 'The subperitoneal variety has recently been proved by frozen sections of a case described by Hart and Carter, and quoted at length, and therefore does occur.' There is, in my opinion, no evidence in either Jessop's or Champneys' case of subperitoneal development and secondary rupture. Moreover, Mr. Tait, in my opinion, disregards the evidence of cases which he quotes when he says that Mr. Jessop's case is (p. 59) 'perfectly unique,' and states that 'as a matter of fact it stands by itself, and may therefore be known as the case of intraperitoneal ectopic pregnancy.' I leave Mr. Tait to reconcile the words he uses about Dr. Herman's paper (review, p. 129) with the alleged adoption of his results. Dr. Herman (p. 84) describes certain conditions in which vaginal is to be preferred to abdominal section, and Mr. Tait not only says that the result of Dr. Herman's observations is fatal to vaginal section, but adds, 'This kind of research is really of little value,' &c. (review, p. 129). If this is not contemptuous dismissal, Mr. Tait will perhaps describe it to his taste. As regards Dr. Champneys' paper, the words may be quoted (p. 98): 'Certainly it is not a question which will be settled by the tabulation of a number of cases mostly dissimilar in the extremest degree from one another, and incapable of leading to anything but confusion when paraded in the form of statistical evidence.' This was his language with regard to what he now calls 'a valuable contribution.' As regards the list of operations, the details or nature of the proof of each should have been included in a work bearing the title which this work bears, and I cannot agree that the proof of tubal gestation is 'as easy as possible'; on the contrary, the identification of the placenta is often a matter of great difficulty.'

THE USE OF IODOFORM IN SURGICAL PRACTICE.

To the Editors of THE LANCET.

SIRS,—Messrs. Thomas Smith and Morrant Baker, and Dr. Brandt of Christiania, have written me very kind letters respecting a case of "curious delirium resembling mania" occurring during the after-treatment of a case of suppurative peritonitis, treated by laparotomy and drainage fully reported in THE LANCET of Dec. 29th. They suggest that the delirium was caused by iodoform poisoning, which was my own view, though that was not mentioned in the very brief abstract of the case, which alone had been seen by the three gentlemen above named (who wrote before Dec. 29th). Mr. Marsh and others have spoken to me on the subject, and Dr. Street, of Westgate, has sent you an interesting letter and case.

I have been particularly asked to write to you and call attention to the danger of the signs of iodoform poisoning being overlooked or confounded with delirium or mania from other causes. Messrs. Smith, Baker, Brandt, and Marsh have all seen very striking cases. Mr. Morrant Baker also asks me to point out that the signs of poisoning do not always disappear when the drug is discontinued. Indeed, the powder cannot always be got out of the recesses in which it is placed.

As sometimes the cases do not end until the lunatic asylum or death itself is reached, the subject is very serious and important. For myself, I usually employ iodoform crystals very sparingly, and the powder not at all if the crystals are to be had. But iodoform gauze is surely an invaluable, a unique, and irreplaceable substance. I have occasionally noticed such symptoms as headache, rise of temperature, rapid pulse, and irritability fairly attributable to iodoform used moderately, but nothing worse. In the case of laparotomy under notice, both the powder and gauze were used exceptionally freely. Two sheets of iodoform gauze, each, when open, the size of a large pocket handkerchief, were folded like closed umbrellas, and nearly half of each placed in the abdominal cavity (for reasons explained in describing the case). About half a thimbleful was placed in the bottom of the glass drain in Douglas's pouch. Moreover, the gauze was wrung out in 1 to 2000 sublimate before being used, and kept moist where it lay on the skin of the flanks (to make it act as a capillary drain). But the fact must not be ignored that the symptoms of (iodoform?) poisoning did not disappear until *all* antiseptics were discontinued, including boracic acid, and nothing but boiled water used. Von Mostig-Moorhof says carbolic solutions should not be used with iodoform, because the former tend to check elimination by the kidneys. Can sublimate solutions or even boracic act in the same way? I should be very sorry if my case were to deter surgeons from using the moist iodoform gauze capillary drain in

peritoneal suppurations. The latter are serious and mortal conditions, and ought to be treated courageously. The gauze can easily be withdrawn at any time, in which respect it differs advantageously both from powder and crystals. For moistening the gauze when used in large quantities, probably boiled water had best be used. But for all ordinary quantities sublimate solutions do very well. The gauze may be adulterated. An instance is reported in which a beautiful specimen was found to have been stained yellow with an aniline die, and to contain only just enough iodoform to make it smell.[1] A very cursory examination would discover this. Lastly, there seem to be individual idiosyncrasies and weakly people; the old and (according to Dr. Brandt) the very young are specially liable to iodoform poisoning.

I am, Sirs, yours faithfully,

George-st., Hanover-sq., Jan. 14th, 1889. C. B. KEETLEY.

FOREIGN BODIES IN THE AIR PASSAGES.

To the Editors of THE LANCET.

SIRS,—In your last issue (Jan. 19th) there appears an article on the above subject, in which it is stated that "all authorities urge the immediate performance of tracheotomy in every case where the foreign body is diagnosed as present below the larynx.' It is also laid down that "after, but not before, free incision has been made into the trachea, a good inversion and succussion may be safely tried, and are especially likely to succeed if the foreign body is heavy and smooth." If the author of this article will refer to THE LANCET of Nov. 16th, 1878, p. 721, he will find a communication from me, in which I have pointed out how this proceeding of inversion, supplemented by a suggestion of Dr. George Johnson, may, without opening the trachea or larynx, be adopted with safety, and with a fair probability of success in the case of coins and similar bodies. It at once succeeded without any unpleasant symptom in the case I have there narrated, in which, if the dictum urged in the article from which I have quoted had been acted upon, an unnecessary tracheotomy would have been performed; and other cases have been recorded in which this manœuvre has been successful, with, no doubt, a certain amount of risk and danger in the attempt as ordinarily practised. The danger of the practice, as I have pointed out, has depended upon the mode in which it has been carried out, notably in the case of the late Mr. Brunel. The principle, and the practice founded upon it, of the plan I have adopted and advised are referred to in Erichsen's Surgery; and by its adoption in suitable cases a serious operation may, without risk to the patient, be rendered unnecessary.

I am, Sirs, yours faithfully,

Swansea, Jan. 19th, 1889. GEORGE PADLEY.

THE PROTECTION OF THE MEDICAL PROFESSION.

To the Editors of THE LANCET.

SIRS,—Not until our profession makes up its mind to combine and demand our right of protection shall we get rid of our present difficulties. In pouring forth now what I consider to be our grievances, more particularly as general practitioners, and the remedies to be adopted, I will endeavour to be as brief and concise as the importance of the subject will permit.

1. By absence of unanimity and action we have allowed one-sided legislation at various times to take place, binding us down by certain laws, increasing the stringency of those laws, warning us under heavy penalties that we shall not do this, that, and the other, whilst we have shut our eyes and waited to see what would be sent us; on opening them we find ourselves fettered heavily, but with no protection whatever ourselves against the quack and the charlatan. Solicitors are well protected, and have their tariff of fees; anyone entering a solicitor's office knows what fee he becomes liable for; let a notary or accountant attempt to overstep that line, which is so clearly defined, and the result is disastrous to him.

2. The practitioner is in frequent instances compelled to supply his patient, whether he requires it or not, with something tangible to take away with him as a sort of return for his money, in order to obtain a fee, his patient not being satisfied to pay for advice; the question asked is not "What is your fee?" but "How much is the medicine?" If it is the custom of the practice to give a prescription, the patient uses it first himself, and, out of the gratitude of his heart, lends it in due course to his various friends and relatives.

3. We see constantly the evil results of the public treating their own complaints, or being treated by the druggist, or gratuitously at the out-door department of a local hospital. As regards self-dosing, which is on the increase, the profession itself is much to blame. It is no unusual thing for a patient to introduce himself with—"Dr. Blank was giving me bromide, but latterly he tried chloroform and Indian hemp," &c. This custom of telling the patient too much is a modern one, is most pernicious, is prolific of evil, and has its origin in the hospital. Our forefathers were certainly in this matter wiser and more discreet. The profits which ought to accrue to the practitioner, were he protected as justice demands, go into the pockets of lawless self-constituted prescribers. We practitioners rob the druggist of the dispensing which is his due, whilst he robs us of what would be the pleasantest and most profitable part of our duties—home prescribing. The local hospital is, as a general rule, a curse to the general practitioner, frequently robbing him of some of his best paying patients.

4. On the one hand, we see a few heads of the profession amassing large fortunes, raising their fees perhaps to fabulous prices to keep the public from the doorstep; whilst, on the other, we see the plodding, laborious, general practitioner, in many instances both skilful and experienced, who can scarcely "make his ends meet." The well-to-do portion of the community naturally, as legislation (free trade?) now exists, rush at once, if ill, to head-quarters—i.e., to their idea—of the leading fashionable man in town, with the consequence that the general practitioner is left to be dependent upon the poor and the artisan, his fees being kept down to ridiculously low figures by his neighbour, the intelligent druggist, who can afford to do the same work at a lower figure.

These few axioms I propound as the principal of our grievances as general practitioners. What, then, is the remedy? Some such legislation as the following:—

1. That no person, except he be a registered medical practitioner, shall prescribe in any case of illness, attempt either to perform any surgical operation or reduce any fracture or dislocation.

2. That no prescription be dispensed by a druggist without being first signed and dated by a registered practitioner, each repetition undergoing the same ordeal.

3. That no more patents be granted for proprietary medicines.

4. That no practitioner be allowed to regularly dispense for his patients, only in cases of emergency (so worded as to allow of his carrying a pocket-case of drugs, or keep a private selection for his own use or for emergencies).

5. That a special class of practitioners be formed, with a separate place in the Register, to be called "consultants," consisting of (*a*) physicians and (*b*) surgeons. That no practitioner shall assume the position of "consultant" unless he possess a university degree in medicine and surgery, as well as a fellowship from either college, according to the branch he takes up, and until he has attained the age of thirty-five years.

6. That no "consultant" shall attend a patient professionally except he be introduced by, and the patient be under the care of, a general practitioner.

7. That special tariffs of fees be prepared for use by the two classes of practitioners—(1) for general practitioners; (2) for consultants, consisting of (*a*) physicians (*b*) surgeons.

These suggestions may appear at first sight to border upon the impossible, but when we come to consider the immensity of the change necessitated by the measure that has just become law in this country, turning every county in England and Wales topsy-turvy, surely we may be allowed to consider, with a view to future legislation, any system which has for its object the amelioration of a profession acknowledged to be one of the most noble, and surely not the least important, ever instituted by man; a profession at present without any system, method, or proper government; a profession apparently at the mercy of all and protected by none. It is only by the adoption of some such system as I have here roughly sketched that the discordant units which at present palm themselves off as the "medical profession" can be consolidated and made into one harmonious whole. It is only in this manner that

[1] G.R. Fowler, Ann. of Surg., Dec. 1888.

the two classes—viz., the general practitioner and the consultant—can be protected against each other on the one hand, and the druggist on the other. The last, assuming his proper place as "dispenser of prescriptions" and "vendor of drugs"; the practitioner, instead of, as now, "retailer of mixtures and pills," his, as "prescriber," and occupying the place warranted by the expense of his education; and the consultant, instead of attracting, unwillingly perhaps, patients away from the general practitioner, occupying, by virtue of his superior attainments, an altogether higher position in the profession, somewhat analogous to the barrister,—he, the general practitioner, and the druggist being alike the gainers.

In order to obtain these measures, our motto must be combination, unanimity, and firmness now, and in the end protection. I am, Sirs, yours truly,

Dovercourt, Jan. 21st, 1889. W. W. HARDWICKE, M.D.

To the Editors of THE LANCET.

SIRS,—The following case illustrates the open manner in which illegal practice is permitted under existing circumstances, and demonstrates the necessity for the formation of some active and powerful association of legally qualified medical practitioners to protect the interests of the profession as well as of the public.

A man, whose name does not appear in either Medical Register or Directory, took some months ago a large house in a well-known London square, belonging to a noble duke, whose name it bears, a square in which, judging from the rentals and from the apparent stringency of the leases, the tenants should be very respectable people. Yet an illegal practitioner — in plain English, a quack doctor—is allowed to occupy this prominent position, and to place upon his door a bold brass plate, on which is engraved his name, with the "title, addition, or description," Aural Surgeon; to advertise himself extensively in town and country papers as "an eminent aural specialist of London," who "has hit upon a cure" for "deafness and noises in the head"; and to refer the public to a threepenny pamphlet he has published, which can be obtained at his address in this London square. As further illustrating how advertising quackery flourishes, to the detriment of legitimate practice, this man keeps his carriage and pair of horses, with liveried coachman and footman, &c.; his next-door neighbour, who is M.D. Oxford, M.R.C.P. Lond., goes on foot.

Had the medical profession a governing and protecting body, similar to that of the legal profession (the Incorporated Law Society), how quickly that illegal door-plate would disappear, and this brazen breach of Section 40 of the Medical Act be stopped. But at present our professional authorities appear to be in a state of lethargy, and openly allow that most important section of the Act to be a dead letter, useless alike for the protection of the profession or the public from want of enforcement. The Medical Council, as at present constituted, is either helpless or indifferent, and, although large fees are paid for registration, comparatively little benefit is derived. The Council state plainly that they *do not* institute proceedings against illegal practitioners, but leave this step to individuals, who naturally do not feel disposed to take action, and so quacks and other poachers upon the profession and the public escape punishment and flourish upon the spoils.

Now, with a reasonable amount of *esprit de corps* among our 20,000 legally qualified practitioners and a small annual subscription from even the majority, an active and powerful association could be formed able to prevent the profession being robbed and degraded so openly and the public being plundered with such impunity by these impostors. There is a very general opinion in the profession that it is the duty of the Medical Council to do this work, with which I thoroughly agree, and would urge that this question be made a most prominent one at the next election of representatives of the profession, and only those candidates supported who distinctly promise to endeavour to carry out this view to the utmost of their powers. Meanwhile we should remember that unity is strength, and organise accordingly so as to be in a position to help and protect ourselves.

I enclose my card, and shall be happy to co-operate in the matter with your previous correspondents on this subject.

I am, Sirs, yours faithfully,

Jan. 15th, 1889. ANTI-QUACKERY.

GENERAL PARALYSIS OF THE INSANE IN GENERAL HOSPITALS.

To the Editors of THE LANCET.

SIRS,—The desire to keep my paper, which has started this discussion, within limits, led me to curtail my general remarks, and allow the cases to speak for themselves. But as the purpose for which they were published has been so much misunderstood, may I make it plain that it was not to advocate any particular plan of treatment, but to emphasise a fact which, though by no means new, has not yet attained the prominence it deserves—viz., that some cases of general paralysis commence in, and for a long time remain limited to, the spinal cord, the peripheral nerves, and the nerve trunks, without any implication of the cerebral cortex, so far as can be judged from the symptoms. Since my paper was published Case 2 has died, and though unwilling to anticipate a future communication, as the microscopic examination is not yet complete, I may say that I have found most distinct and widely distributed interstitial neuritis. The adhesions of the pia-arachnoid to the cerebral cortex, characteristic of general paralysis, were well marked. Peripheral neuritis[1] has been found on several occasions by other observers. The existence of lateral sclerosis was mentioned in Case 1. Ataxia and sclerosis of the posterior columns is well known to occur in other cases. Dr. Bristowe has called attention to the difficulty, in some instances the impossibility, of distinguishing in the early stage between general paralysis, disseminated sclerosis, and alcoholic paralysis. All three may present mental symptoms. In fact, most diseases of the nervous system, but especially diseases of the cord, are associated with some degree of mental change capable of recognition. General paralysis, more than any other mental disease, presents signs of the affection of other parts of the nervous system besides the brain. Loss of the knee-jerks and trembling of the lips cannot be due to any affection of the cerebral cortex; and there are strong grounds for believing that the thickness of speech and the pupillary changes result from disease of the cranial nerves or their nuclei, and not of the cerebral cortex.

A few days ago I saw, in consultation with a colleague who has had considerable experience of mental diseases as an official at Colney Hatch, a man twenty-eight years of age, presenting loss of weight and strength, diminution of the knee-jerks, inequality of the pupils, trembling of the lips, thickness of speech, and difficulty in putting out the tongue, but with good memory and no mental defect capable of detection. We both agreed that there could be little doubt that the case was general paralysis. But I maintain that the law does not allow such a case, *without mental symptoms*, to be detained against his will in an asylum, as a lunatic or person of unsound mind. And, *so long as no mental symptoms supervene*, I am convinced, from some experience in watching cases in the neighbouring asylums and lunatic hospital, that such a patient will do better in a comfortable home or in a general hospital than fretting against the loss of liberty in an asylum, or shocked by the behaviour or irritated by the taunts or assaults of other lunatics.

The brain and pia-arachnoid in general paralysis present naked-eye changes which are generally, though *by no means invariably*, well marked. But it is a simple misuse of words to call them, as Dr. J. Adam does in his second letter, "*thoroughly disorganised*"! There can be little doubt that general paralysis is on the increase in this district, whatever it may be in the district and among the class from which Dr. Adam draws his experience. At the Borough Asylum during the past year 34 per cent. of the male admissions were cases of general paralysis. From the County Asylum I hear that they have never had such a large proportion of general paralysis or such bad cases. And among the in- and out-patients of the General Hospital I have seen more cases during the last two years than in the previous eight.

In reply to Dr. Norman Kerr, let me assure him that he need be under no anxiety as to the comfort of my patients in the Nottingham General Hospital. I am not prepared to yield to anyone in my desire to consider the feelings of the patients. Before posing as the champion of patients who are unaware of any grievance, and endeavouring to stir up

[1] Dr. Abundo on General Paralysis of the Insane. London Medical Recorder, 1888.

strife by implying that I am indifferent to their welfare, it would have been well if he had ascertained whether any cases of general paralysis had by their "*destructive or filthy habits*" injured the progress of the mentally sound patients. Let me assure him such is not the case. Cases of mental disease are not admitted, and no patient in whom mental aberration has arisen is, as a rule, retained in the hospital. But, apart from the delirium of acute disease, such as pneumonia or enteric fever, apart from delirium tremens, I have seen mania arise in the early convalescence of enteric fever, in the last few days of life in cardiac disease, after hæmorrhage and amputation of a limb, and finally in hydrophobia, where the patients were too ill to be removed, and necessarily remained in the hospital. Compared with such cases the mental symptoms in the five cases of general paralysis (with the exception of Case 1, which was removed as soon as possible) were trivial, and make the present outcry seem, as it really is, ridiculous.

If Dr. J. Adam, when he wrote "that cases which some twenty or thirty years ago, or even in more recent times, would have been deemed and dealt with as *incurable and hopeless* have now, under improved methods, assumed more hopeful aspects, are capable of being returned to society, and of leading fairly *useful* and happy lives," was simply alluding to the "*remissions*" with which, as he truly says, every tyro is familiar, and which many authorities consider part of the natural course of the disease, it is difficult to understand the meaning of words.

The question of early diagnosis I have dealt with by showing that it is necessary not only to diagnose general paralysis, but also to show the necessity of asylum treatment involving loss of liberty.

I am, Sirs, &c.,

Nottingham, Jan. 19th, 1889. HENRY HANDFORD.

*** This correspondence must now cease.—ED. L.

ON THE BEST MODE OF DELIVERING THE FŒTAL HEAD AFTER CRANIOTOMY.

To the Editors of THE LANCET.

SIRS,—Having been absent from town, I was unable to join in the discussion on the above subject at the last meeting of the Obstetrical Society of London, and this must be my excuse for asking a short space to allude to some points importantly germane to a consideration of the matter. I do not remember any paper bearing on it at the Obstetrical Society since 1864, when I read one having the same title.[1] In it I recalled the experiments of Drs. Hull and Burns, and demonstrated, what is clear enough on reflection, that if the fœtal calvaria were removed and the face made to present the vertical diameter put in the conjugate of the pelvis, and consequently the transverse of the fœtal head in the transverse of the mother, there would be a possibility of delivery, *quoad* the head of the fœtus, in a pelvis 1⅞ in. in conjugate and 3⅜ in. in transverse. If the lower jaw were broken, then the vertical face would be less, not much over an inch. I gave results of experiments, and illustrative cases but not in pelves so reduced. In conclusion, I said if we, after perforation of the forecoming head, sat down quietly to remove the calvaria piece by piece, leaving the scalp, then passed up a small blunt hook into the orbit and drew down the brow, and then passed the hook on to the upper and then the lower jaw, the face would present; at the same time directing the chin to the front, the head so mutilated would readily descend, and by this method little damage would be done to the soft parts of the mother.

But this paper was written before I had used the cephalotribe. Two years later, at the time of the exhibition of obstetric instruments, I had the great advantage of the use of almost all the cephalotribes then in existence, and, being at that time active head of the large maternity of Guy's Hospital, I was enabled to make practical experiments on the dead fœtus. As the outcome of this work, I laid before the Obstetrical Society a cephalotribe which now goes by my name, having also put it to the test of actual use. In further communications in 1869 I entered into the principles of the action of the cephalotribe, and pointed out that generally the base of the skull was not crushed, but was tilted and lay flat between the blades, the calvaria being flattened also, one side lying on the inside of the base; and, in a second paper, discussed the relative value of the different types of instruments. At that time I said: "Since I have begun to employ it (my cephalotribe) after perforation I have not had occasion to use the crochet and craniotomy forceps, and am confident that it has shortened the delivery by three-quarters of the time those other instruments would have required."

But to get the full value out of the cephalotribe we must also use it as a tractor; hence the advantage of those like mine, Simpson's, and others, which incurve well at the end. This power of traction enables us to deliver at once, for I never knew it to fail to hold firmly the crushed head. And thus we are able to do away with the necessity for turning before cephalotripsy, a movement I always avoid in those cases where one sees that a living head cannot pass the brim. Indeed, if labour has been on for some hours, as it usually is in such cases, the uterus is generally irritable and rigid, even under chloroform, making version difficult and risky.

In cases where, after the forceps has failed, we still like to give the child a chance by turning, if the head fail to pass we can perforate; and if fair traction with small blunt hook in the opening (the point towards the foramen magnum) cannot deliver, then the cephalotribe can be used with great success. Still in pelves diminutive in all parts, the forecoming flattened head having yet one diameter unreduced, and this diameter unable to pass, we may find that the method I had suggested in 1864 assists us to make a more easy delivery than by means of the cephalotribe, if we take the several steps calmly and certainly before employing traction.

In cases where there are very highly ossified heads there is much difficulty with both methods, and it may be that when the crush occurs we shall find a very severe ridge of the calvaria, causing much anxiety when the cavity of the pelvis is cramped. But in extreme contraction of the brim I would say that the facial portion requires crushing as well, and this makes it imperative that as far as possible we should fully make out the actual relationship of head to pelvis in all stages of the work. But though by either the first method alluded to above or by the cephalotribe we can reduce the head, yet generally in these small pelves another question presents itself urgently after cephalotripsy—namely, the best method of delivering the body. The settlement of these questions becomes very important, because these bad cases are becoming more rare and experience less by improved sanitary conditions; and by the extension of Cæsarean section on the one hand and induction of premature labour on the other into the area of dystocia; and yet cases will present themselves where the one is impossible, and the other has been evaded or not known to be necessary, as the author of the paper, Dr. Archibald Donald, remarked. I am gratified to find that the opinion of the advantages of the cephalotribe expressed in my paper has been confirmed by the experience of those who have ample opportunities of trying it. I quite agree that if we are to turn the child, it would be best to perforate after, and as near the centre of the base as possible, so as to destroy its integrity. When we have done this the use of a small blunt hook will generally suffice to deliver.

I am, Sirs, yours faithfully,

J. BRAXTON HICKS.

George-street, Hanover-square, W., Jan. 14th, 1889.

[1] Obst. Trans. Lond., vol. vi., p. 263.

"INACCURACIES ABOUT VACCINATION."

To the Editors of THE LANCET.

SIRS,—On looking at the passage in the Encyclopædia article on Vaccination, to which "Reader" calls attention, I find that the text introducing the table of infantile syphilis makes it clear, beyond all suggestion to the contrary, that the figures in the table are the actual deaths, that the heading of the table contains an obvious slip of the pen ("death-rate") which has no significance without the usual addition of "per million living," and that the text following the table disclaims the view that the increase of infantile syphilis is due to vaccination.

I am, Sirs, your obedient servant,

Jan. 22nd, 1889. ABOVE THE BELT.

To the Editors of THE LANCET.

SIRS,—In the third line of my letter to you of last week on the above subject, *really* is a misprint for *rarely*,

Dr. Creighton having stated in his article that the choosing of nurses from those who had had small-pox was no rare occurrence. Trusting you will insert this important correction, I am, Sirs, yours faithfully,

Seagrave-road, Fulham. Jan. 22nd, 1889. R. D. R. SWEETING.

THE BIRMINGHAM WORKHOUSE INFIRMARY.

To the Editors of THE LANCET.

SIRS,—With reference to your comments upon my speech at the luncheon, will you do me the justice of inserting a letter from me which appeared in the *Birmingham Daily Post* of January 12th.—I am, Sirs, yours truly,

C. W. SUCKLING.

"To the Editor of the Daily Post.

"SIR,—In answer to an 'Anxious Inquirer,' will you allow me to state that I meant to say that the nurses were excellent in their own department, and that I had no intention of saying anything derogatory to my medical brethren. I much regret that I was not more explicit.

"I am yours faithfully,

"Jan. 19th, 1889." "C. W. SUCKLING, M.D.

ALCOHOLIC PARAPLEGIA.

To the Editors of THE LANCET.

SIRS,—Will you kindly give me space for a small correction? In my reply closing the Pathological Society's discussion on Alcoholism, amply reported in your last number, I spoke of Dr. Handfield Jones's paper on Paralysis from Alcohol as having preceded Dr. Wilks's on the same subject. This referred to the latter's article on Alcoholic Paraplegia in THE LANCET, March, 1872. But I overlooked Dr. Wilks's cases and remarks referring to this subject in his lectures on Diseases of the Nervous System published in the *Medical Times and Gazette*, Oct. 20th, 1868, p. 470. I am, Sirs, your obedient servant,

Wimpole-street, W., Jan. 23rd, 1889. J. F. PAYNE.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE ROYAL VISIT TO MIDDLESBROUGH.

THE Prince of Wales visits Middlesbrough to-morrow, to open the new Town Hall, just erected in the ironstone capital of the north. He will see on all sides evidences of the enterprise which has converted a swampy village into a manufacturing town of 60,000 inhabitants; and most of this substantial progress has taken place within the last thirty years. One of the duties which the Prince has kindly undertaken in this busy day is the inspection of the various ambulance corps of Cleveland, and this ceremony is looked forward to with much interest, as it has always been understood that the ambulance bodies of Cleveland have from an early period in the history of the movement ranked high in order of drill and efficiency.

NEWCASTLE THROAT AND EAR HOSPITAL.

The season for the annual meetings of our medical institutions has now commenced, and the Throat and Ear Hospital is early in the field. It was shown by the report presented yesterday, the Mayor presiding, that 2215 cases had been treated during the year, involving about 10,500 separate consultations given by the medical staff. The voluntary contributors, who are mostly of the working classes, have been most liberal, nearly £300 having been contributed by them during the year. The hospital authorities have purchased premises near the West Moor in this city, as a branch where such patients may be sent who require change of air or skilful nursing after any necessary operation. The financial statement was also satisfactory.

THE NEW PROFESSORSHIPS IN THE UNIVERSITY OF DURHAM.

The announcement that the University of Durham had appointed Drs. Heath and Oliver, of this city, to the new chairs of surgery and physiology, has been received here with feelings of much satisfaction. Dr. Heath, of course, is respected as a veteran in practice, in operating, and in teaching, and has his pupils now in many parts of the world. Dr. Oliver is young, and for this reason is to be congratulated on the event, but he has been always distinguished as a hard worker, for his deep knowledge of his subject, and for his attainments and skill as a physician. I understand that the endowments of the chairs are to come out of the University chest, and I believe this is the first medical endowment the University has granted in connexion with the Medical College here, for the chair held so worthily by Professor Philipson is founded on the Brackenbury Trust.

Newcastle-upon-Tyne, Jan. 22nd.

EDINBURGH.

(From our own Correspondent.)

ROYAL MORNINGSIDE ASYLUM.

DURING the past week a somewhat wordy war has been raging in the Edinburgh newspapers over the proposal to build a new asylum on the Craig House estate. Two of the managers, whose legal qualifications for the office appear to be unexceptionable, but whose other qualifications are not so apparent, have quarrelled with the rest of the Board of Management, which they assail on the ground that the expenses connected with the maintenance of the asylum are excessive. For this there does not appear to be the slightest foundation, as the asylum keeps its private patients for £4 8*s.* less than the Scotch average, whilst its pauper patients cost £6 13*s.* per head less than the average cost per patient in all the counties of Scotland in which district asylums have been erected. The principal point, however, concerning which they fall foul of the managers, is the subject of the erection of the new house above mentioned. They have put into print their reasons for the step they are taking; but so far these reasons are eminently unsatisfactory. As regards the site, the highest medical and architectural authorities have been consulted, and they one and all approve of the proposed site as extremely well adapted to the purpose for which it is required. Sir Douglas Maclagan, one of the Board of Managers, in an exceedingly able and temperate letter, published in Friday's *Scotsman*, disposed most completely of almost every objection adduced by the dissenters from the proposed plan. As answer, a letter appeared in which little new argument is brought forward, but a most uncalled-for attack is made upon the present medical superintendent of the asylum—an attack that stamps only too plainly the spirit in which the objections are raised. The asylum was in its present position long before the houses near it were built, and even up to the present nothing has been heard of any inconvenience to the inhabitants of the district. Now, however, a letter signed by thirty-five persons has been made public, in which it is stated that "much fear and alarm were caused by people having to pass the lunatics who are sent out for exercise." This has been going on for years, but not until now has this fear found voice for expression. It is contended that the value of property in the neighbourhood cannot rise if the asylum is to remain in the district. The objectors entirely overlook the fact that the presence of the asylum has not been any bar to an almost unprecedented rush of building operations within the last few years. Even if it were so, should that do duty for argument as to suitability of the site? The Morningside Asylum is one of the best equipped and most carefully managed in Scotland. It is so far in advance of many other similar institutions that it is taken as the model on which a very large number of new asylums are built. The proximity to town is certainly an advantage to patients; and the staff, both medical and attendant, can be no worse for not being entirely cut off from sane society and some rational source of amusement and instruction. Is there not some slight foundation for the popular belief that people who live always with madmen sooner or later become mad also? Intercourse with a sane world must surely be advantageous for both staff and patients; and a doctor in an asylum in a lonely district may well be excused if he arrive at the conclusion that the world is peopled by madmen, and that it is worth little effort to turn the mind from one species of insanity to another. Such a long note on this subject may appear out of place in an Edinburgh letter read elsewhere; but here the interest taken in the matter is at present very considerable.

THE ROYAL SOCIETY.

Sir Douglas Maclagan presided at the fourth ordinary meeting of the session held yesterday evening, where, amongst other papers, was read one by Mr. J. Arthur Thomson on the History and Theory of Heredity. Speaking of the facts of inheritance, he pointed out that there was a reappearance of general characters, of individual congenital idiosyncrasies, of pathological features, and even of individually acquired characters. He elucidated the fact of germinal continuity, in accordance with which a certain number of cells were set apart to remain unchanged and to form the reproductive cells of the next generation. The paper was full of features of interest, but a more careful study than can be given at a single hearing is necessary in order to arrive at an exact estimate of its permanent value. Drs. Haycraft and Carlier also communicated a note on the conversion, by means of friction, of ciliated into stratified squamous epithelium, accompanied by a demonstration.

Edinburgh, Jan. 23rd.

IRELAND.

(From our own Correspondent.)

DUBLIN.

THE SANITARY CONDITION OF THE ROYAL BARRACKS.

An admirable communication has recently been made on this subject by Dr. John Roche, a retired army surgeon, Dr. Roche has, with a civil engineer, carefully examined these barracks, and it may not be uninteresting briefly to summarise the results of his investigations. The site, he states, is about 300 yards from the river Liffey, and some 40 ft. above the bed; the soil is a light loam, on a thick layer of gravel over a stiff clay. When he visited the barracks last week, earth openings from 6 ft. to 18 ft. deep had been made in different places for examination of the subsoil and the drains. The subsoil he found perfectly pure, while the drainage was excellent, so that soil saturation with sewage is palpably non-existent. The distance and height from the river does not admit of it being the source of the mischief to the health of the soldiers; besides, the pollution of the Liffey as it enters the city here is comparatively insignificant to what exists further on, and if a few small drains discharging sewage could be the cause of so much mischief, and at such a distance, the great number, quantity, and proximity of drains lower down in the city should decimate the population. Outside the foundation walls excavations to their full depth were made in several places, and there the earth was found to be devoid of anything indicating organic danger. It was, however, waterlogged, and the water percolated the foundation walls in some parts as high as two feet above the flooring. A concrete open drain is being constructed, and the basement wall cemented; but to be thoroughly satisfactory Dr. Roche suggests that a French drain should have been placed under the concrete, which would prevent the basement from taking up water by capillarity and exhalation from the site. The cubic space per man appears not to be sufficient. For example, one room intended for sixty men gave about 600 cubic feet per man, one for fifty men about 400 cubic feet per man, &c. These rooms had numerous fever cases, although there were ample means for ventilation by windows, chimneys, and artificial arrangements. There were, however, no ventilators between the ceiling and boards, or between the ground and the floor-boards (with a few exceptions), all of which were either rebated or tongue-tied. There was thus pent-up air which became foul, and which got liberated by change in temperature from the cold air admitted in the day to the heat of crowding at night, by the change from moisture on scrubbing-day to the dryness succeeding, and by the vibrations attending the movements of persons. Some of the rooms are counter-ceiled, and as the counter-ceiling is incomplete and broken in many places, notably over the stables in the Dragoons' quarters, over the sergeants' mess-room and the cookhouse, in quarters where fever has been prevalent, it will account, Dr. Roche believes, for the comparative immunity which the Surrey Regiment has enjoyed, and the manner in which the Dragoons and Lancashire Regiment have suffered. He suggests that ventilators should be placed under the floors and opposite each other, so as to effectually purify the air between the ceiling and the boards, and between the floor and the basement throughout the entire barracks. Dr. Roche is of opinion that a few hundred pounds expended in ventilating, concreting, and providing French drains would remove the cause of unhealthiness in these otherwise excellent buildings. The statement made in one of the Dublin newspapers, to the effect that the inspection of these barracks by the Secretary of State for War, the Quartermaster-General, and the principal medical officer, resulted in demonstrating that the site was saturated with sewage, and that dead bodies were exhumed therefrom, appears to be erroneous. In view of the insanitary condition of these barracks, the military authorities have, I learn, determined to transfer the wives of the married soldiers stationed there to wards in Steevens' Hospital. The transfer will take place on Feb. 1st. It is reported that a private of the 5th Dragoon Guards died on the 22nd inst. from typhoid fever contracted in the Royal Barracks.

THE PROPOSED AMALGAMATION OF THE DUBLIN MEDICAL SCHOOLS.

I believe I am correct in stating that owing to the opposition shown by one of the proprietors of the Carmichael College his colleagues have withdrawn from the Amalgamation Scheme of the Dublin Medical Schools, and have signified their intention to the Council of the College of Surgeons. The matter will not be allowed to rest here, inasmuch as a very influential member of council, who is an ex-President, has given notice that at the next meeting of the Council he will move that the amalgamation of the Ledwich with the College School shall be carried out. Should this be adopted, the arrangements as agreed upon by the various schools interested must be materially altered, in consequence of the withdrawal of the Carmichael College.

DR. M. A. BOYD, OF DUBLIN.

The many friends of this well-known Dublin physician will be gratified to learn that he escaped last week from what might have been a very serious accident. While driving, a wheel of his brougham came off, and the horse, a spirited animal, bolted. The driver was thrown from his seat, and was seriously injured, Dr. Boyd escaping by jumping from the carriage. The brougham was smashed to pieces, and the horse was badly hurt.

EDWARD ALEXANDER STOKER, A.B., F.R.C.S.I.

At a very advanced age, Mr. Stoker died on the 19th inst., at his residence in Rutland-square. For upwards of a quarter of a century the deceased held the post of examiner in anatomy in the Royal College of Surgeons, and performed the duties in a thoroughly efficient and impartial manner. Two sons of Mr. Stoker belong to the medical profession.

At a recent meeting of the Council of the Royal College of Surgeons in Ireland, Professor Rawdon Macnamara was re-elected a Representative of the College on the General Medical Council for the ensuing year.

Dublin, Jan. 22nd.

PARIS.

(From our own Correspondent.)

STROPHANTHUS AND STROPHANTHIN.

At a recent meeting of the Academy of Medicine, the debate opened by Professor Germain Sée on the relative properties of strophanthus and strophanthin was resumed, and Dr. Bucquoy replied to his various critics. M. Sée, it will be remembered, advocated the use of strophanthin, which, he claimed, presented many advantages over strophanthus. Dr. Bucquoy, on the other hand, in his clinical experience, obtained less good results from strophanthin than from strophanthus. He found that strophanthus is a cardiac medicament of the first order, having the same properties as digitalis, and its action may be compared to that of the ergot of rye as regards the augmentation of the contraction of the cardiac fibres. This action is produced rapidly, and is sustained during the whole of the time that the drug is administered. As already remarked, the effects of strophanthus are analogous to those of digitalis. One difference, however, consists in the action of digitalis on arteries. This vaso-constrictive action may be advantageous; but it may equally have

drawbacks which strophanthus possesses in a much less degree. The other advantages of strophanthus over digitalis are that it may be administered and tolerated, without inconvenience, for a long time, and Dr. Bucquoy adds that its prolonged use does not destroy the effects of the drug, and that its action even persists for a considerable time after it has been left off. Strophanthus does not accumulate in the organism as does digitalis, and does not, like the latter, produce nausea, which is often prejudicial. The only symptom of intolerance that sometimes occurs is a diarrhœa without colic, which soon ceases when the medication is suspended. Dr. Bucquoy is unable to formulate the contra indications of the employment of strophanthus, not having had as yet sufficient experience with the drug. He never, however, observed any accident consecutive to its administration, even when employed at untimely periods. He does not consider it a dangerous remedy, and it is, moreover, easy of employment. He founded his observations on forty patients, taking the state of the pulse and sphygmographic tracings. Of these forty patients twenty had mitral insufficiency. Three times only did the strophanthus completely fail. With this drug the pulse soon diminishes in frequency, the œdema disappears, and the patients feel considerable improvement in their condition. In mitral lesions strophanthus is particularly useful when it is necessary to prolong the action of the drug. Whenever, however, the peripheric arterial system is altered, strophanthus is contraindicated, also in interstitial nephritis and in albuminuria. In angina pectoris, Dr. Bucquoy employed strophanthus in three cases with astonishing effects. In exophthalmic goitre, on the contrary, he did not obtain favourable results. Owing to the variable composition of the different tinctures found in commerce, Dr. Bucquoy gives the preference to the extract, the dosage of which is more exact and the mode of administration more precise. He prescribes it in the form of granules of one milligramme, which corresponds to five drops of Fraser's tincture. The number of granules daily should but very rarely exceed four milligrammes, to which they should be raised progressively, beginning with two the first day, and increasing to three and four the following days. This dose may be continued for a very long time without causing the least inconvenience. As regards strophanthin, Dr. Bucquoy states that he had never obtained such favourable results as with the strophanthus. In a general way, it may be said that strophanthin is to strophanthus what digitaline is to digitalis, and it should be prescribed only in doses of one-tenth those of the extract.

At the meeting of the Academy of Medicine last week, Dr. Dujardin-Beaumetz, resuming the discussion on the therapeutic action of strophanthus, said that he accepted nearly all the conclusions of Dr. Bucquoy. For several months Dr. Dujardin-Beaumetz experimented with the extract of oleander, and up to the present time he has established the fact that this extract possesses all the properties of strophanthus. Professor Germain Sée has studied the action of strophanthus and the rank that the new remedy should occupy among the cardiac medicaments. He shows that the physician should prefer to the divers preparations made with the entire plant—as the tinctures or extracts—those which only contain the active element which he requires, those which are chemically pure, and which—as the alkaloids, the glucosides, and the salts—will always in the same dose produce the effects expected. He demonstrated by examples the importance of definite preparations—how the sulphate of quinine, for instance, had the advantage over the cinchona bark. He remarked also that chemistry permitted us to draw from various plants the same medicament with identical properties. Thus caffeine is found in abundance in the kola nut. The alkaloids are more or less terrible poisons, but when it is known in what dose they may be employed there is nothing to be feared; whereas with the preparations furnished by the entire plants—with the leaves of digitalis for example—the same dose of the substance will sometimes scarcely manifest any action, whilst at other times it will act with unexpected violence, because it contains the active substance, which varies in proportions always unknown. On this ground M. Germain Sée bases the superiority of strophanthin over the extract of strophanthus. After making some observations on diseases of the heart, the subjects of which may live many years, he compares other cardiac medicaments with strophanthus. The principal symptoms to be combated in diseases of the heart are, he said, dyspnœa, weakness of the heart, and dropsies. The best remedy against dyspnœa is the iodide of potassium, which is not only a tonic of the heart, but would be a complete cardiac medicament if it were diuretic. When associated with milk it becomes an efficacious remedy in the greater number of diseases of the heart. If the physician wishes to act directly on the heart, he will have the choice between digitalis, the salts of potash, sparteine, and strophanthus. But between these toni-cardiacs digitalis should be preferred, as it is the most diuretic. If, on the contrary, the physician seeks a diuretic action in particular, he should not select from among the cardiac medicaments, properly speaking, but among the substances which produce, not a prolonged urination, as in the case of strophanthus, but an abundant diuresis. Thus M. Sée with calomel produced an emission of seven or eight litres of urine, and he saw several cases of dropsy cured sometimes in twenty-four hours. Caffeine also acts as a true diuretic, and in this respect it has the advantage over strophanthus. In conclusion, M. Sée, whilst recognising in strophanthus useful properties, does not assign to it in the treatment of the diseases of the heart the rank given it by Dr. Bucquoy.

COMPULSORY VACCINATION IN SCHOOLS.

The Minister of Public Instruction has issued a decree to the effect that all children applying for admission to primary elementary schools should furnish a certificate of birth and a medical certificate stating that they had been vaccinated or had had the small-pox, and that they are not affected with any malady or infirmity of a nature to injure the health of the other pupils. When the pupil has attained his tenth year, he should, in order to be admitted or retained in the school, be revaccinated by the physician attached to the school. Another decree requires: 1. That the pupils of the primary superior schools and the candidates for the primary normal schools should present a certificate of revaccination. 2. That the candidates of the normal primary superior schools should furnish a certificate of recent revaccination. These decrees are almost equivalent to compulsory vaccination and revaccination. Owing to the recent occurrence of syphilis having been communicated by arm to arm vaccination, it has become a question whether animal vaccination should not be made compulsory.

Paris, Jan. 22nd.

Obituary.

PROFESSOR JOHANN WAGNER, M.D.

DR. WAGNER was for nearly forty years Professor of Medicine at the University of Buda-Pesth. The loss of three great teachers—namely, Professor Coloman Balogh, Professor Lenhossék, and now Dr. Wagner—at intervals of a few months, we might almost say a few weeks only, has cast a gloom over our professional brethren in Hungary. Dr. Wagner died on the 2nd inst. at Buda-Pesth. He was born at Komora in 1811, and obtained a good early education at Presburg; He studied medicine at the University of Vienna, where he received his doctor's degree in 1835. He soon commenced practice at Buda-Pesth, and took an active and prominent part in the labours of medical and surgical societies. In 1847 he became connected with the Hungarian University; in 1848 he was appointed to fill the chair of Pathology and Therapeutics; and on the breaking out of typhus fever at Pesth in the same year he was placed in charge of the temporary fever hospital. In the course of arduous duties Wagner himself was attacked by the epidemic, and narrowly escaped with his life. On the death of Professor Sauer, in 1868, Wagner was selected to fill the vacancy as senior Professor of Medicine and a member of the Board of Health. In due course honours were showered upon him by being elected a member of the Academy of Sciences, and an honorary Fellow of the Medical and Surgical Society of Buda-Pesth; he was nominated Aulic Councillor, and subsequently the Knighthood of the Order of the Iron Crown and the honorary Fellowship of the University of Vienna were conferred upon him. In 1887 failing health compelled him to resign his chair, and he had lived in retirement since.

Dr. Wagner was the pupil of what is known as the *first* or older Vienna school; he was in full practice when Skoda

and Rokitanski became famous and founded the *second* Vienna school. Eager to profit by the instruction of the new teachers, Wagner relinquished practice for a time and returned to Vienna to study auscultation, percussion, and other methods of more accurate diagnosis under Skoda, and pathology and morbid anatomy under Rokitanski. What he learnt there he carried with him to Hungary, for the benefit of his patients and pupils. He was ever a keen and careful observer, following with scrupulous attention the progress in diagnosis and treatment.

Wagner's mind had a predilection for eclecticism, but cautiousness in that direction never carried him to extremes of doubt. Averse to showy diagnostic pretensions, he preferred simplicity and straightforwardness at all times, and was never ashamed to acknowledge difficulties when they baffled his skill. Polypharmacy he greatly disapproved, without running into the other extreme of expectant nihilism. About the year 1846 Wagner introduced the use of cold water in the treatment of typhoid fever, and his subsequent fame as a practical physician dates from that period. We may say that he was a student all his life, and, having no family cares nor any special hobbies to divert his mind, all his energies and rare abilities were devoted to his pupils and to the profession. After retirement from active duties he still continued from time to time to visit the hospital wards.

Although no scientific discovery or professional literary work of any magnitude is connected with Dr. Johann Wagner's name, his memory will, nevertheless, continue to live for many years to come in the grateful recollection of his patients, and in that of a large number of medical practitioners, who carried away into every-day life the beneficent lessons taught them by their master for the relief of suffering humanity.

GEORGE DUFF, M.D. EDIN.

DR. DUFF of Elgin, whose death from erysipelas and congestion of the lungs we announced last week, was born in 1819, and graduated at Aberdeen University in 1842. When a young man he practised in Genoa, and attended Daniel O'Connell in his last illness. Dr. Duff was for many years president of the Literary and Scientific Association, and took great interest in all movements having for their object the intellectual and moral improvement of the people amongst whom he lived and laboured.

Medical News.

UNIVERSITY OF CAMBRIDGE.—At a congregation held on the 17th inst. the following degrees were conferred:—

Bachelor of Medicine.—Herbert Wm. Maclure, Pembroke; Bertram Vesey Sortain, Gonville and Caius; Alfred Thomas Guy Watts, Corpus Christi; Herbert Prior Veale, Christ's; John Clough Hardman Dickinson, Walter Sydney Lazarus-Barlow, Downing; Reginald John Roberts, non-collegiate.

Bachelor in Surgery.—Herbert William Maclure, Pembroke; Bertram Vesey Sortain, Gonville and Caius; Herbert Prior Veale, Christ's; Walter Sydney Lazarus-Barlow, Downing; Reginald John Roberts, non-collegiate.

MEDICAL DEFENCE UNION.—The annual general meeting of this Society is to be held at 12, Granville-place, Portman-square, to-day (Friday) at 5 P.M.

LITERARY INTELLIGENCE.—Dr. N. S. Davis, of Chicago, has retired from the editorship of the *Journal of the American Medical Association*, his successor being Dr. John B. Hamilton.

BRIDGNORTH AND SOUTH SHROPSHIRE INFIRMARY.—At the annual meeting of subscribers the report, which was adopted, showed the institution to be doing good work. The donations, which have been unusually large, included an anonymous gift of £50.

WEST CORNWALL INFIRMARY.—Major Ross, the President, occupied the chair at the sixteenth annual meeting of the subscribers, held at Penzance on the 16th inst. The balance sheet showed a debit of £84. During the year, 1575 out-patients and 116 in-patients had been treated. The committee urgently pressed for additional subscriptions to avert any curtailment in the number of beds at present available.

VACCINATION GRANT.—The following gentlemen have received the Government grant for efficient vaccination in their respective districts:—Mr. Henry Whiting, M.R.C.S., L.S.A., of the Haslemere district of the Hambledon Union (eighth time); Dr. Chas. Farrar of Chatteris.

NATIONAL REGISTRATION OF PLUMBERS.—Dr. Ewart, chairman of the Sanitary Committee, Brighton, has been elected president of the District Council for Sussex, for the current year. It has been arranged to open classes for plumbers in the Brighton Technical Institute.

HEALTH CONGRESS AT HASTINGS.—A largely attended meeting was held on the 17th inst., in the council chamber of the Hastings Town-hall, under the presidency of the mayor (Councillor Stubbs), for the purpose of making the preliminary arrangements for the Health Congress to be held at the commencement of May next.

PRESENTATION.—The ambulance class, organised by Messrs. Earles and King, Liverpool, consisting of thirty members from among their *employés*, have presented Dr. F. C. Servaes of Prince's-road, their ambulance instructor, with a handsome leather writing-case and memoranda tablet, as a small token of their appreciation of his services as lecturer.

"THE LAWN," LAMBETH.—The Princess Louise and the Marquis of Lorne attended a meeting at Willis's Rooms this week, convened by the Kyrle Society, in aid of the scheme for securing "The Lawn," Lambeth Palace, as an open space. It was announced that the Duke of Bedford had offered to contribute £500 to the purchase fund. Resolutions in favour of the objects of the meeting were unanimously agreed to.

THE EMPRESS FREDERICK AND THE GERMAN HOSPITAL.—During the week the Empress Frederick visited the German Hospital at Dalston. The Empress was conducted through the adult wards and conversed with the patients, among whom was a soldier who was wounded in the Franco-German war. The Empress afterwards visited the children's ward, and spoke kindly to each of the little patients.

OPENING OF A HOSPITAL AT GLOSSOP.—On the 21st inst. a hospital erected in the new park at Glossop was opened without public ceremony for the reception of patients. It has been erected and endowed at a cost of £25,000 by the late Mr. Daniel Wood, of Glossop, and will accommodate sixteen patients. Mrs. John Wood, a resident, has furnished the hospital, and Mr. J. B. Rowcliffe has gratuitously supplied the beds.

THE UNIVERSITY EXTENSION MOVEMENT IN CHELSEA.—The experiment of founding a centre of university extension in Chelsea has, we learn, proved very successful. Mr. Lant Carpenter's lectures on "Electricity in the Service of Man" were attended by an audience averaging nearly 250 students, drawn from all grades of society, and the results of the examination just received are very satisfactory.

ST. JOHN AMBULANCE ASSOCIATION: CRICKHOWELL BRANCH.—Mr. Philip E. Hill, M.R.C.S., has just brought to a close his series of lectures on "First Aid to the Injured and Sick" in connexion with the above Association. The final lecture for each class was distinct, the lecture to the women being on Nursing, and that to the men on Stretcher Exercises, and the methods of lifting and carrying the sick or injured on improvised seats and stretchers. The classes were well attended, and the knowledge imparted was much appreciated. The examining surgeon, Mr. H. C. Moore, Hereford, expressed himself in complimentary terms as to the manner in which the members were instructed, theoretically as well as practically.

BRIGHTON, HOVE, AND PRESTON DISPENSARY.—The annual meeting of the governors was held at the institution on the 17th inst.; Alderman J. L. Brigden presided. A satisfactory report was submitted to the meeting. The removal of the Western Branch Dispensary to Sackville-road rendered necessary the rearrangement of the medical districts, which had been effected. The receipts had amounted to £3042 2*s.* 10*d.*, an increase of £1046 1*s.* on those of 1887, and the balance in hand on the general fund was £42 0*s.* 7*d.* During the year 11,680 patients had been treated at the three establishments. The visiting medical officers continue to report most favourably of the good results from the Jubilee and Samaritan Fund.

GIFT TO BOLTON.—In addition to his previous munificent gifts to the town, amounting to £30,000, Mr. J. P. Thomasson, formerly M.P. for Bolton, has recently purchased Mere Hall Estate, comprising about six acres of land, which he intends to adapt for recreation purposes for the use of the public, and to present it to the borough.

ROYAL VISIT TO QUEEN CHARLOTTE'S LYING-IN HOSPITAL.—Princess Christian, accompanied by Dr. Cohn of Wiesbaden, and attended by Mrs. Jeune, paid an unexpected visit to this hospital on Monday afternoon last. Her Royal Highness visited a number of the wards, and also inspected the kitchen arrangements, and the nurses and servants' halls. At the termination of the visit, which lasted about an hour, Princess Christian was pleased to express her satisfaction with everything she had seen.

LEAD POISONING AND THE BRADFORD WATER-SUPPLY.—The increasing number of cases of lead poisoning throughout the wide area comprising the out-townships which are supplied with water from the corporation has led to a proposal that joint action should be taken by the local boards on the question, with the view of either inducing the Borough Corporation to filter the water previously to supplying it to the out-township consumers, or free them from the responsibility of a compulsory service from the corporation.

PUBLIC HEALTH MEDICAL SOCIETY.—At a meeting of the council of this Society, which consists of medical men qualified in sanitary science, held on Jan. 22nd, 1889, the secretary reported the steps taken in bringing under the notice of the Government the conclusions come to by the Society in regard to the Burgh Police and Health Bill (Scotland). Considerable discussion took place regarding the subject of inspectors of examinations for public health diplomas, and it was decided to be necessary that such inspectors should be appointed, and that the efficiency of the examinations would be best upheld by proper inspection. Twelve gentlemen were elected members of the Society.

MANCHESTER MEDICO-ETHICAL ASSOCIATION.—The forty-first annual meeting of this Association was held on Friday, January 18th, 1889. The report of the Committee showed continuous prosperity with a steady increase of funds. The following gentlemen were elected office-bearers and members of the Committee for the year:—President: Dr. A. Wahltuch. Vice-Presidents: Dr. A. Emrys-Jones, and Messrs. J. Broadbent, T. N. Dean, and J. Foster. Treasurer: Dr. D. Lloyd Roberts. Secretaries: Drs. F. H. Collins and F. M. Pierce. Committee: Drs. H. W. Boddy, A. M. Edge, J. T. Faulkner, J. Ferguson, C. Holmes, Leslie H. Jones, P. H. Mules, E. Rayner, and W. Walter, and Messrs. E. Jackson, W. Lauder, and J. A. Palanque.

BEQUESTS AND DONATIONS TO MEDICAL CHARITIES. Under the will of the late Mr. John Griffith, the executors have just forwarded £4000 to each of the following metropolitan hospitals: The London, Guy's, Middlesex, and St. Mary's. Mr. Griffith died in September last, and belonged to a medical family; was himself an architect, but was apprenticed at Apothecaries' Hall, to the grandfather of Dr. Griffith of Finsbury-square.—By the will of the late Mrs. Frances Grant, of Dacre Hill, Bebington, Cheshire, £500 is bequeathed to the Liverpool Hospital for Skin Diseases, £500 to the Medical Mission Society, £200 to the Home for Incurables, £200 to the Convalescent Home, New Brighton, and £200 to the Woolton Convalescent Home.—The Grocers' Company last week made a grant of £50 to the funds of the City Dispensary.—The late Mr. Charles Sever, of No. 8, Park-place, Cheetham, Manchester, has bequeathed £100 to the Northern Counties Hospital for Incurables, and £50 each to the Clinical Hospital for Women and Children, at Cheetham, the Royal Eye Hospital, Manchester, the General Hospital and Dispensary, and St. Mary's Hospital and Dispensary, Manchester.—The box collections for the year 1888 in aid of the Richmond (Surrey) Hospital amounted to £366 11*s.* 2*d.*—The ball held at the Brighton Pavilion on the 14th inst., in aid of the St. John's Convalescent Home for Children, produced £73 10*s.* 6*d.*—The Leeds Workpeople's Hospital Fund, on behalf of the three borough medical charities, for 1888, amounted to £4319, of which £3542 was allotted to the Infirmary, £431 to the Dispensary, and £345 to the Hospital for Women and Children.—The Amateur Theatricals, recently held at Clevedon, realised £55 14*s.*, which has been handed over to the Cottage Hospital.

LEEDS MEDICAL SCHOOL DINNER.—Dr. C. J. Cullingworth, obstetric physician to St. Thomas's Hospital, London, presided at the tenth annual dinner of the Leeds medical students, past and present, held this week at the Queen's Hotel, Leeds. The company were about 110 in number. After dinner toasts and speeches followed, and an enjoyable evening was wound up with songs and recitations by some of the medical gentlemen present.

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ANDERSON, A. JASPER, M.A., M.B. Oxon., has been appointed Honorary Medical Officer to the Pendleton Branch Dispensary of the Salford Royal Hospital, vice Mr. A. T. Winterbottom, resigned.

ANNINGSON, BUSHELL, B.A.Cantab., M.A., M.D., M.B., M.R.C.S., has been reappointed Medical Officer of Health, Cambridge Union District.

BRAYE, R. J., M.R.C.S., L.R.C.P. Lond., has been appointed Medical Officer to the Western (No. 2) District of the Billesdon Union, Leicestershire.

BREEN, HENRY, L.R.C.S.Irel., L.R.C.P.Edin., has been appointed Medical Officer, Derrylin Dispensary District, County Fermanagh, vice C. G. Westropp, resigned.

CANN, T. M., M.R.C.S., L.M., L.S.A., has been appointed Medical Officer of the Workhouse and the Second District, Newhaven Union.

COSGRAVE, E. MACDOWEL, M.D., F.K.Q.C.P., has been appointed Physician to Cork-street Fever Hospital, Dublin.

FITZGERALD, G. C., B.A., M.B., B.C.Cam., M.R.C.S., has been appointed Senior Assistant Medical Officer to the Surrey County Asylum, Cane Hill, vice H. Gardiner Hill, resigned.

FOX, W. H. P., L.R.C.P., L.R.C.S., and L.M.Edin., has been appointed Medical Officer of the Sixth District, Parish of St. Mary, Lambeth.

GAFF, JAS. D., M.D., C.M.Glasg., has been appointed Medical Officer of the Fifth District, Parish of St. Mary, Lambeth.

HARDWICK, A., M.B.Durh., L.S.A., has been appointed Medical Officer and Public Vaccinator of the Fifth District, St. Columb Major Union, vice T. Boyle, M.R.C.S., L.S.A., deceased; Surgeon to the Oddfellows and Foresters' Societies, and the Western Provident Association, Newquay, Cornwall; also Medical Referee to the Prudential Assurance Company, vice T. Boyle, M.R.C.S., L.S.A., deceased.

HOUSLEY, JOHN, M.D. St. And., M.R.C.S., L.S.A., has been appointed Medical Officer to the Worksop Local Board.

INMAN, R. E., M.R.C.S., L.S.A., has been appointed Medical Officer of the Haggerston District, West Parish of St. Leonard, Shoreditch.

LAKIN, CHARLES, L.R.C.P. Edin., L.S.A., L.F.P.S.Glas., has been appointed Medical Referee to the Liverpool United Legal Friendly Society for Leicester.

MONTGOMERIE, H. M., M.B. and C.M.Edin., has been appointed Assistant Physician to the West Cornwall Infirmary.

OLIVER, F. H., L.R.C.P.Lond., L.S.A., has been appointed Medical Officer of St. Leonard District, Parish of St. Leonard, Shoreditch.

PHILLIPS, EDWD., M.B.Durh., M.R.C.S., L.R.C.P.Edin., has been appointed Honorary Surgeon to the Coventry and Warwickshire Hospital, vice Aitkens, deceased.

PURDON, RICHARD J., M.D., M.Ch., R.U.I., &c., has been appointed Assistant Honorary Physician to the Belfast Charitable Society.

ROBINSON, W. T. G., M.D., M.B. and C.M.Glasg., has been appointed Physician to the Poole Medical Aid Association.

WEARNE, VIVIAN, M.R.C.S., L.S.A., has been appointed a Honorary Surgeon to the West Cornwall Infirmary.

WHITESIDE, JOHN HEWETSON, M.B.Edin., and C.M., has been appointed Medical Officer and Public Vaccinator for the Morland District of the West Ward Union, Westmorland.

WILSON, R. MERVYN, B.A., M.B., B.Ch., L.M. Rotunda (Dublin), has been appointed Assistant House Surgeon to the Derbyshire General Infirmary.

WOOD, CHARLES, M.R.C.S., L.S.A., late House Surgeon, has been appointed Honorary Medical Officer to the Dover Hospital and Dispensary, vice J. Marshall, L.R.C.P., resigned.

Vacancies.

In compliance with the desire of numerous subscribers, it has been decided to resume the publication under this head of brief particulars of the various Vacancies which are announced in our advertising columns. For further information regarding each vacancy reference should be made to the advertisement.

EVELINA HOSPITAL FOR SICK CHILDREN, Southwark-bridge-road, S.E.—House Surgeon. Salary £70 per annum, with board, washing, and residence.

LUNATIC ASYLUM, The Coppice, Nottingham.—Assistant Medical Officer. Salary £100 per annum, with furnished apartments, board, washing, and attendance.

PARISH OF ST. GEORGE-IN-THE-EAST.—Assistant Medical Officer for the Infirmary and Workhouse. Salary £120 per annum, with board, apartments, &c.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan.—Junior House Surgeon. Salary £80 per annum, apartments, and rations (exclusive of wines, spirits, and washing).

YORK RETREAT, York.—Junior Assistant Medical Officer. Salary for the first year £30, with board.

Births, Marriages, and Deaths.

BIRTHS.

GILES.—On the 18th inst., at Wem, Shropshire, the wife of B. Faraday Giles, M.D., of a daughter, who only survived her birth a few hours.

LEWERS.—On the 17th inst., at Wimpole-street, Cavendish-square, W., the wife of Arthur H. N. Lewers, M.D.Lond., M.R.C.P.Lond., of a son.

LYNCH.—On the 12th inst., at Boyne-terrace, W., the wife of J. Roche Lynch, L.R.C.P. Lond., of a son.

NICOLSON.—On the 18th inst., at the State Asylum, Broadmoor, the wife of David Nicolson, M.D., Superintendent, of a daughter.

POTTS.—On the 20th inst., at Leatherhead, Surrey, the wife of Laurence Potts, M.R.C.S., &c., of a daughter.

RAKE.—On the 22nd ult., at Maraval, Trinidad, the wife of Beaven Rake, M.D.Lond., J.P., Medical Superintendent of the Trinidad Leper Asylum, of a son.

VIVIAN.—On the 22nd inst., at Chase Side, Southgate, the wife of R. T. Vivian, L.R.C.P.E., M.R.C.S., of a son.

MARRIAGES.

BEDDIE—BURNETT.—On the 15th inst., at Broad-street, Fraserburgh, by the Rev. W. Paterson, assisted by the Rev. R. Taylor, New Pitsligo, William Beddie, M.A., M.B., C.M., Fraserburgh, to Nelly, eldest daughter of Robert Burnett, Esq.

CHRISTOPHERSON—CROUCH.—On the 17th inst., at St. Peter's Church, Belsize-park, Hampstead, Cecil Christopherson, M.R.C.S., L.R.C.P., of Carlisle-parade, Hastings, second surviving son of Derman Christopherson, of Grove House, Kidbrook, to Florence Sarah, second daughter of Chas. W. Crouch, of Fellow's-road, Hampstead.

GREEN—CROPPER.—On the 17th inst., at St. Luke's Church, Great Crosby, near Liverpool, Conrad Theodore Green, M.R.C.S., L.R.C.P. Lond., to Frances Mildred Theodosia, eldest daughter of Edward Wm. Cropper, of Fearnhead, Great Crosby.

LIVERMORE—ARNOLD.—On the 22nd inst., at St. Mary's Church, Hornsey-rise, William Leppingwell Livermore, M.R.C.S., L.R.C.P., second son of the late Isaac Livermore, Esq., of Barnston Hall, to Fanny Alice, eldest daughter of James Arnold, of Ravenscourt, Holly-park, Crouch-hill, N.

JONES—MOSLEY.—On the 17th inst., at the Parish Church, Cheadle, Cheshire, by the Rev. F. A. Macdona, M.A., William Wansbrough Jones, M.A., M.B.(Oxon.), of Didsbury, near Manchester, to Kate Alice, younger daughter of William Mosley, of Springfield, Cheadle.

DEATHS.

CHALMERS.—On the 18th inst., Thomas D. Chalmers, M.D. Edin., aged 43.

COX-HIPPISLEY.—On the 17th inst., at his residence, High Cross-street, Leicester, of pneumonia and bronchitis, Wm. Ashley Cox-Hippisley, M.B., eldest son of the late W. A. Cox, of Bath, surgeon.

DAVIDSON.—On the 19th inst., at 29, Cassland-road, South Hackney, Charles Davidson, M.D. Friends will please accept this intimation.

DAVIES.—On the 7th inst., at Llanrwst, Robert Davies, M.R.C.S., J.P., aged 64.

HOLDER.—On the 11th inst., lost in the wreck of the *Priam*, off the coast of Spain, Sydney Ernest Holder, M.D., youngest son of the late James Holder, of Adelaide, aged 26.

JACOB.—On the 31st ult., at Toungboo, Lower Burmah, of typhoid fever, Arthur Howard Jacob, Surgeon, I.M.S.

KITTOE.—On the 18th ult., at Cowley, St. John's, Oxford, Kirby Kittoe, M.R.C.S., aged 68, deeply mourned.

LANG.—On Sept. 29th, at Kingston, Jamaica, Alexander M. Lang, M.D., (son-in-law of James Stewart, Esq., Shaw Park), deeply regretted.

LOBB.—On the 20th inst., at Russell-square, Harry Lobb, M.R.C.S., aged 59.

MACKINTOSH.—On the 20th inst., at Woodside-place, Glasgow, Alexander Mackintosh, M.D., Honorary Consulting Physician to the Royal Asylum for Lunatics, Gartnavel, Glasgow.

MALLAM.—On the 19th inst., at Kidlington, Richard Mallam, M.R.C.S., L.S.A., late of Hooknorton, aged 78.

URQUHART.—On the 20th inst., at Mountgerald, Elgin, Lewis Carmichael Urquhart, M.D., retired Staff Surgeon, R.N., aged 71.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

BOOKS ETC. RECEIVED.

BLACKIE & SON, 49, Old Bailey, London, E.C.

Elementary Inorganic Chemistry: Theoretical and Practical, with a Course of Chemical Analysis, and a series of Examples in Chemical Arithmetic. By A. Humboldt Sexton, F.R.S.E. 1889. pp. 320. Price 2s. 6d.

CASSELL AND COMPANY, LIMITED, London.

The Year-book of Treatment for 1889. A Critical Review for Practitioners of Medicine and Surgery. pp. 344.

CHURCHILL, J. & A., New Burlington-street, London, W.

The Quarterly Journal of Microscopical Science, December, 1888. Edited by E. Ray Lankester, M.A., LL.D., F.R.S., E. Klein, M.D., H. N. Moseley, M.A., LL.D., F.R.S., and A. Sedgwick, M.A., F.R.S. With Lithographic Plates and Engravings on Wood. New Series. No. CXV. (Vol. 29, Part 3.) 1888. Price 10s.

Guy's Hospital Reports. Edited by N. Davies-Colley, M.A., M.C., and W. Hale White, M.D. Vol. 45, being Vol. 30 of the Third Series. 1888. pp. 498. Price 7s. 6d.

The Operations of Surgery, intended especially for the use of those recently appointed on a Hospital Staff, and for those preparing for the Higher Examinations. By W. H. A. Jacobson, M.A., M.B., F.R.C.S. With 199 Illustrations. 1889. pp. 1136.

CROSBY LOCKWOOD & SON, 7, Stationers' Hall-court, Ludgate-hill, E.C.

Plumbing. A Text-book to the Practice of the Art or Craft of the Plumber. By W. Paton Buchan, R.P. Fifth Edition, with 380 Illustrations. 1889. pp. 362.

DOIN, OCTAVE, 8, Place de l'Odéon, Paris.

Fièvre des Foins Pathogénie et Traitement. Par le Docteur Marcel-Natier. 1889. pp. 159.

LEE & SHEPARD, Boston, U.S., and L. N. FOWLER, Imperial Buildings, Ludgate-circus, London, E.C.

Physical Development of the Laws governing the Human System. By Nathan Allen, M.D., LL.D. 1888. pp. 348.

LEWIS, H. K., 136, Gower-street, London.

The Causation of Disease. An Exposition of the ultimate factors which induce it. By Harry Campbell, M.D. 1889. pp. 368.

Massotherapeutics; or, Massage as a mode of Treatment. By William Murrell, M.D., F.R.C.P. Fourth Edition. 1889. pp. 236.

Epitome of Surgery, being a complete Compendium of the Science and Art of Surgery. By Ridley Dale, M.D., M.R.C.S. 1889. pp. 498.

A Text-book of Human Physiology. By Austin Flint, M.D., LL.D. With 316 Figures in the Text, and two plates. Fourth Edition, entirely rewritten. 1888. pp. 872.

LONGMANS, GREEN, & Co., London.

Report of a Committee of the Clinical Society of London, nominated Dec. 14th, 1883, to investigate the subject of Myxœdema. With Appendix Supplement to Volume the 21st. 1888. pp. 202.

SIMPKIN, MARSHALL & CO., Stationers' Hall-court, London. C. MITCHELL & Co., Red Lion-court, Fleet-street, London.

Urinary Diseases: Analysis of 500 cases. By David Jones, M.D. Second edition. Edited by Gordon G. Jones. 1888. pp. 99.

Efficiency of Irish Schools. By Maurice C. Hime, M.A., LL.D. 1889. pp. 84. Price 1s.

STANFORD, EDWARD, Cockspur-street, Charing-cross, London.

Transactions of the Sanitary Institute of Great Britain. Vol. 9. Congress at Bolton. 1887-88. pp. 595.

SWAN SONNENSCHEIN & Co., Paternoster-square, London, E.C.

Lessen Liquor and Defy Disease. Queen Anne's Hospital, its Senators and Sufferers. By A. T. Schofield, M.D. 1889. pp. 363.

THE MEDICO-LEGAL JOURNAL ASSOCIATION, Broadway, New York.

The Medical Jurisprudence of Inebriety. Being Papers read before the Medico-Legal Society of New York, and the Discussion thereon. 1888. pp. 183.

THE SECRETARY, Home Hospital, 10, Dean-street, Soho, London.

Homœopathy: its Truth, its Law of Cure, and its Statistics. With 30 years' experience in the cure of cases. By David Jones, M.D. 1888. pp. 136. Price 2s. 6d.

WILLIAMS & NORGATE, 14, Henrietta-street, Covent-garden, London.

Memoirs and Memoranda in Anatomy. By J. Cleland, M.D., J. Y. Mackay, M.D., and R. B. Young, M.A., M.B. 1889. Vol. I. pp. 187. With 16 Plates.

YOUNG J. PENTLAND, Edinburgh and London.

Diseases of the Skin: a Manual for Practitioners and Students. By W. Allan Jamieson, M.D., F.R.C.P.Edin. Second Edition, Revised and Enlarged. With woodcut and eight coloured illustrations. 1889. pp. 585.

Vergleichende Beurtheilung der verschiedenen Methoden des Steinschnitts bei Männern; von Dr. Joseph Smits (Franz Pietzcker, Tübingen; Trübner & Co., London).—The Cosmopolitan, January, 1889; new series; No. 1, vol. 4 (Digby & Long, London). Price 1s.—Physical Drill, with and without arms, and the new Bayonet Exercise; by Lieut.-Col. G. M. Fox; with illustrations. (William Clowes & Sons, Limited, London, S.W. 1889.) Price 1s.—A Wonderful Truth; Mouth Breathing, and the evils which it entails; by Professor Guy F. Whiting, M.D. 1889. Instructive Reading Series. No. 1. Price 6d. Contribution à l'Étude du Mutisme hystérique; par Marcel Natier (Octave Doin, Paris. 1888.)—Twelve Years' Trial of the Vivisection Act (39-40 Vict., c. 77); has it stopped the scientific torture of animals in England? by M.R.C.S. (Swan Sonnenschein, Lowrey, & Co., London. 1889.) Price 3d.—The Eye of the Adult Imbecile; by Chas. A. Oliver, M.D. Philadelphia. Reprinted from transactions of the American Ophthalmological Society, 1887.—The Medical Jurisprudence of Inebriety; being papers read before the Medico-legal Society of New York and the discussion thereon (published by the Medico-legal Journal Association, New York. 1888).—The Life Register (West, Newman & Co., London. 1888.)—Mansill's Almanack of Meteorology and Planetary Phenomena for the year 1889 and System of Science; by Richard Mansill, Rock Island, Illinois. 1888. Price 25 cents.—Street's Indian and Colonial Mercantile Directory, 1888-89. (Published by Street & Co., London.)—Saccharin; the place of saccharin in Pharmacy: with formulæ; by Professor Attfield, F.R.S. (Wilson, Salamon & Co., London. 1889.)—Some Proposals for Contributions by Patients to Hospitals; by Nelson Hardy, F.R.C.S.Ed. (Whiting & Co.)—Magazines for February: Leisure Hour, Sunday at Home, Boy's Own Paper, Girl's Own Paper.

Medical Diary for the ensuing Week.

Monday, January 28.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations daily at 10 A.M.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M.; Thursday, 2.30.

ST. MARK'S HOSPITAL.—Operations, 2 P.M.; Tuesday, 2.30 P.M.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and each day in the week at the same hour

SOCIETY OF ARTS.—8 P.M. Mr. Alan S. Cole: Egyptian Tapestry and Textiles. (Cantor Lecture.)

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Mr. Pearce Gould: Child with several Malformations.—Dr. Sainsbury and Dr. Ormerod: Cases of Friedreich's Disease.—Mr. Stephen Paget: Congenital Syphilitic Affection of Nails.—Mr. Davies-Colley: Partial Excision of Elbow for old Unreduced Compound Dislocation.—Dr. Hadden: Muscular Atrophy with Ophthalmoplegia Externa.—Dr. Drewitt and Dr. Beevor: Cases of Pseudo-hypertrophic Paralysis.—Mr. Pitts: External Dislocation of Patella in a Child.

Tuesday, January 29.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour Ophthalmic Operations on Monday at 1.30 and Thursday at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2 P.M.; Saturday, 2 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Consultations, Monday, 2.30 P.M. Skin Department, Monday and Thursday, 9.30 A.M. Throat Department, Tuesdays and Fridays, 1.30 P.M. Electro-therapeutics, same days, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Mr. George John Romanes: Before and after Darwin.

SOCIETY OF ARTS.—8 P.M. Mr. Thomas W. Goad: Gold and Silver Mining in Colorado.

PATHOLOGICAL SOCIETY OF LONDON.—8.30 P.M. President's Address. Specimens:—Mr. W. R. Williams: Specimens illustrating Neoplastic Process in Trees.—Dr. Angel Money: Chronic Syphilitic Meningitis, Arteritis, and Cerebral Atrophy in a Boy aged four, causing Double Hemiplegia.—Mr. Wm. Adams: So-called Congenital Dislocation of the Hip Joint.—Mr. Hutchinson: (1) Fatty Tumour from Scrotum; (2) Illustrations of the Crateriform Ulcer of the Face.—Mr. J. Bland Sutton: Cutaneous Horns. Card Specimens:—Dr. Ormerod: (1) Ulcerative Colitis; (2) Hæmorrhage into Pons Varolii.—Dr. Dunn: Epiphysitis of Upper Extremity of Humerus.

Wednesday, January 30.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M.; Saturday same hour. Ophthalmic Operations, Tuesday and Thursday, 1.30 P.M. Surgical Consultations, Thursday, 1.30 P.M.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M.; Saturday, same hour.

LONDON HOSPITAL.—Operations, 2 P.M.; Thursday & Saturday, same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department, 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M., and on Saturday.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.; Friday, 2 P.M. Saturday, 1 P.M.

CHILDREN'S HOSPITAL, GREAT ORMOND-STREET.—Operations, 9.30 A.M.; Surgical visits on Wednesday and Saturday at 9.15 A.M.

SOCIETY OF ARTS.—8 P.M. Mr. Conrad Beck: The Construction of Photographic Lenses.

Thursday, January 31.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M. Surgical Consultations, Wednesday, 1.30 P.M. Ophthalmic Operations, Friday, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. J. W. Judd: The Metamorphoses of Minerals.

THE SANITARY INSTITUTE (Parkes Museum, 74A, Margaret-st., W.).—5 P.M. Prof. F. Jeffrey Bell: The Worm Parasites of Human Food.

HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. Malcolm Morris: Some Local Eczemas.—Dr. Spicer: Recent Advances in the Treatment of Obstruction of the Nose.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8.30 P.M. Patients and Card Specimens at 8 P.M.:—Mr. Lang: (1) Traumatic Exophthalmos with Retention of Perfect Acuity of Vision; (2)? Fungus Growth in the Cornea; (3) Ophthalmoplegia Externa with Retinal Changes.—Mr. Marcus Gunn: Case of Cystic Formation within the Lens Capsule.—Mr. Adams Frost: (1) Case of Gummata on Iris; (2) Retinitis Pigmentosa with Peculiar Visual Field. Papers:—Mr. Jonathan Hutchinson: On some Exceptional Forms of Choroiditis.—Dr. P. H. Mules (Manchester): Primary Retinal Phlebitis.—Dr. Edridge-Green (introduced): On Colour Blindness and Colour Perception.

Friday, February 1.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—9 P.M. Prof. W. C. McIntosh: The Life-History of a Marine Food-Fish.

Saturday, February 2.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

ROYAL INSTITUTION.—3 P.M. Prof. Ernst Pauer: The Character of the Great Composers and the Characteristics of their Works. (With Illustrations on the Pianoforte.)

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Stewardt's Instruments.)

THE LANCET Office, January 24th, 1889.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Maximum Temp. Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Jan. 18	30·43	S.W.	42	40	69	53	37	..	Hazy
,, 19	30·37	W.	42	41	68	49	40	..	Overcast
,, 20	30·27	E.	41	40	..	45	38	..	Overcast
,, 21	30·30	S.	34	34	..	44	32	·13	Foggy
,, 22	30·40	N.E.	29	37	61	43	33	·03	Cloudy
,, 23	30·50	N.E.	36	35	..	43	34	..	Foggy
,, 24	30·47	N.W.	40	39	..	45	35	..	Foggy

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editors."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed to the Sub-Editor.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "to the Publisher."*

We cannot undertake to return MSS. not used.

MR. HARVEY-GIBSON'S "ELEMENTARY BIOLOGY."

WE have received a complaint from Mr. Harvey-Gibson to the effect that, in a notice of his work on Elementary Biology, the writer stated: "Here and there are omissions which might be supplied in a future edition, as, for example, the lymphatics, of which not a word is said." Mr. Harvey-Gibson refers us "to pp. 277, 278, and 339, where the lymphatics are mentioned and their functions described. the omission, however, I regret to say, occurs in the index," thus implying that our reviewer had looked up "lymphatics" in the index, and, not finding the word there, had at once concluded the subject was not mentioned in the body of the work. We have examined the passages referred to by Mr. Harvey-Gibson, and this is what we find on p. 277: "The glands," he is speaking of the stomach, "are surrounded by fine connective-tissue capillaries and lacteals prolonged upwards from the submucous layer." P. 278 has this: "Each villus is covered by columnar cells resting on a basement membrane and covering a core of submucous tissue consisting of lymphatics, or, as they are now termed, lacteals." On p. 339, speaking of absorption—"The oil globules pass into the lacteals, which in turn communicate with the chief vessel of that system, the thoracic duct, which opens into the left vena cava." Does Mr. Harvey-Gibson think that these three passages give the student adequate information as to the structure and functions of the *lymphatic* system of the body? Should it not be pointed out that there is a widely distributed system of vessels in the body, which does not arise in either the stomach or intestine? These tubes have definite walls, they have many peculiarities of distribution, they possess valves, there are such things as lymphatic hearts, lymphatic glands, and lymphatic sheaths to bloodvessels, all of which should have found a place in the shortest *résumé* of biological science.

Jetty.—1. No.—2. 6 & 7 Wm. IV., c. 89, s. 5.

TYPHOID FEVER FROM THE MILK OF COWS AFTER DRINKING IMPURE WATER.

To the Editors of THE LANCET.

SIRS,—In your journal of Dec. 7th, 1878, p. 830 (as you will find by a glance at Section 1493:2 of the Medical Digest), Dr. Henry Hicks of Hendon records an interesting epidemic of typhoid fever, apparently entirely due to the above cause; so that Mr. Adam Gibson cannot claim originality for the theory, as his annotator, at page 35 in your issue of Jan. 5th, appears to believe his due.

I am, Sirs, yours obediently,

Boundary-road, N.W., Jan. 22nd, 1889. RICHD. NEALE, M.D.

MEDICAL CHARGES.

M.D., M.R.C.S.—The charges seem to be quite reasonable. We think in a medical bill medicines should either not appear, or figure quite subordinately, and so we understand this account. The medicines are thrown in, so to speak, on a charge of three visits for a guinea, which in the circumstances seems, as we have said, quite reasonable.

G. F. P.—We certainly think the medical man was justified in not giving a certificate as to the cause of death. We are also of opinion that he should have been called at the inquest. It might have been left to him to say whether he considered a post-mortem examination necessary. The finding of the jury was consistent with certain facts deposed to by the witnesses; but it is by no means certain that the statements of the latter, although probably made in good faith, correctly represented the real facts of the case.

M.D., an old Subscriber.—21, Oxford-street, London.

G. P. has forgotten to enclose his card.

"THE METROPOLITAN HOSPITAL."

To the Editors of THE LANCET.

SIRS,—In consequence of the action taken by the Committee of the Metropolitan Hospital in re-establishing their institution on what they denominate provident principles, I, in conjunction with other medical practitioners, have issued the following circular letter to the medical men residing in the neighbourhood of the hospital:—

"Jan. 5th, 1889.

"SIR,—You have doubtless seen the correspondence in THE LANCET about the Metropolitan Hospital, and we desire to send a formal protest, of which we enclose a copy, to that paper for publication, to draw the attention of the profession generally to the injustice of this movement. Many cases are within our personal knowledge, first, in which the poor have been refused attendance because they would not subscribe to the provident fund, and, secondly, where persons now members of that fund have hitherto been able to pay even considerable sums to their usual medical attendants. In one instance a man whose wages are within the limit fixed by the committee paid to one of the signatories of the protest the amount of £10 10s. in one sum. Any suggestions that you may wish to make as an addition to the draft protest we shall be pleased to consider. We have already received promises of support from fifteen local practitioners. If you are willing to join in this protest, which, considering the grave issues at stake, we hope that you will be, kindly sign the enclosed form, and return it to either of the undersigned without delay.—We are, Sir, your obedient servants,

"E. H. PETTIFER, A. H. SANDILAND, C. T. SAVORY,
GEO. LOCKE, F. COCKELL."

This letter was accompanied by the following protest:—

"We, the undersigned, medical practitioners resident in the vicinity of the Metropolitan Hospital, Kingsland-road (late Metropolitan Free Hospital), desire to protest against the action taken by the committee of that institution in converting it into a provident dispensary, and we do so on the following grounds:—1. That the function of a hospital is to relieve the medical wants of the poor, whilst this institution, as at present managed, is of little or no use to the poor in the neighbourhood, its rules being so framed that those who cannot pay after the first attendance are turned away from its doors. 2. That this innovation is not a genuine attempt to relieve the poor, but is, as was plainly stated in public meeting by the hon. secretary, an attempt to 'make the thing pay.' 3. That the original funds of the hospital were subscribed to benefit the poor, and not the better class of poor who hitherto have been able to pay their ordinary medical attendant. 4. That the plan establishes a low standard of competition, which is detrimental to the practitioners in the neighbourhood (and by its possible extension to practitioners in general), as well as to the staff of the hospital. It also has the tendency to lower the appreciation by the public of services rendered to them by the profession. 5. A hospital conducted on these commercial principles naturally alienates itself from the support and sympathy of local practitioners."

To this the underwritten signatures have been since appended:—

"Thos. Carey Barlow, E. Denny Burton, Henry Bird, M. Blok, A. Horsley Bossy, T. Lloyd Brown, F. H. O. Chislet, Fk. E. Cockell, jun., Walter Cornelius, J. Cunningham, John Davies, James Dawson, Chas. Day, Chas. Denny, Fk. B. Fisher, Edw. G. Gilbert, Frank Godfrey, James Greenwood, Major Greenwood, jun., Marmaduke J. Hart, Theo. Hoskin, G. Angus Hunt, E. Azer Jones, W. J. Simpson Ladell, Thos. Leonard, David T. Lewis, George Locke, A. Lamont Macphail, G. Town Penny, W. L. Penny, E. H. Pettifer, Alfred Phillips, J. Alex. Rayner, W. A. Rudd, A. H. Sandiland, Chas. T. Savory, C. E. Scudamore, J. M. Smith, A. Felix Stevens, Jas. Steel Swain, H. Rogers Tillstone, Richard Wadsworth, Frederick Wallace, Richd. U. Wallace, A. W. Webb, G. F. White, Willm. Whitelaw, J. F. Woodroffe, W. C. Worley."

There have appeared several letters in your columns from local medical men, expressing their sense of the injustice done by the action of the committee of the hospital in establishing this so-called provident department, but up to the present time no editorial notice has been taken by your journal. From the number of the signatures to the above memorial it cannot be denied that the disapproval of the scheme, by the profession at least, is genuine and widespread, and it may be taken that the subject deserves the attention of professional journals and of the profession at large.

Since issuing the protest we have heard of more cases of persons being attended at the hospital as provident patients, who have hitherto been able to pay their medical attendants even considerable amounts. These were not cases of fraud, but of persons who could not be refused, as their earnings were within the limit fixed by the committee. This dangerous innovation must, if it become general, destroy the good feeling which has hitherto existed between consultants and general practitioners, to the great detriment of the profession. How is it possible for the two grades of medical men to work cordially together if the consultant enters into open competition with the general practitioner by offering, in one capacity, his services to a certain class of the public for the payment of a few pence? It comes with particularly bad grace from consultants, who have, as a rule, of late years doubled their own private fees, to seek to lower to starvation rates those of the general practitioner, who does the drudgery of the profession. The lay portion of the committee are only concerned with the commercial aspect of the hospital management, but we look for more consideration at the hands of the medical element of the board, whose interests should be one with ours. Regarding this further from the layman's point of view, it has come to our knowledge that donations which would in other circumstances have gone to this hospital have been diverted in consequence of the principles on which this institution is now conducted.

In conclusion, I wish to state that it is with no desire of personal notoriety that my friends and I have embarked on this discussion. That we have pecuniary interests at stake it would be useless to deny, but that consideration is but slight when compared with the damaging effect of the scheme to the profession as a whole, both now and in the future. I may add that I was one of the first to whom an appointment as paid local surgeon to this Provident Department was offered, but I declined to accept it for the reasons stated in the protest and in this letter. I am, Sirs, your obedient servant,

Southgate-road, N., Jan. 22nd, 1889. A. H. SANDILAND.

CLEANSING OF SPONGES.

To the Editors of THE LANCET.

SIRS,—In an interesting article in this month's issue of the *Dairy*, descriptive of the hygienic precautions used by the Copenhagen Milk-supply Company at Copenhagen, Dr. G. Bosch writes:—"The filtration is carried out in the following manner: The milk forces itself by its own weight from a higher placed vessel through the bottom of another vessel placed below it; this latter vessel is half filled with a layer of sponges, closely pressed together by means of a perforated sheet of metal placed above them. After having been filtered through these sponges, the milk runs through a pipe terminating in the upper part of a third vessel. One is astonished to see the quantity of impure and uninviting-looking matter which is drawn from the milk by this process. It is superfluous to add that the sponges, after having been used in this process of filtration, are scrupulously cleaned; and this is done by passing them repeatedly through hot steam and pressing them between rubber rollers." Now, it appears to me, if this process for cleansing sponges be so successful in connexion with the manipulation of a sensitive and easily contaminated fluid like milk, which we know is peculiarly ready to absorb septic matter, the system should be equally applicable for the purification of sponges used in hospitals. I therefore take the liberty of bringing it under the notice of your readers, and I shall be grateful for any remarks on the subject, as it is one in which I am much interested.

I may add that I am greatly surprised at this use of re-cleaned sponges in the filtering of milk, as I was under the impression a sponge, no matter how well cleaned, could hardly be used more than once for this purpose. If, however, the dairy system described by Dr. G. Bosch is correct, and he claims for it the virtue of having reduced the death-rate of the city of Copenhagen through the distribution of pure milk, the sponge cleansing process may be found a valuable one to introduce into some of our large hospitals and institutions where sponges are still much used. I am, Sirs, yours faithfully,

Dublin, Jan. 21st, 1889. M. M.

"A USEFUL HINT."

To the Editors of THE LANCET.

SIRS,—Dr. O'Neill's letter in your last issue reminds me of a case I had a few weeks since, where the mother was delivered precipitately in the watercloset. The nurse, who was at hand, was unable to lift the child from its position. On arrival I found the mother tethered by the cord. The child's head had literally passed through a second pelvis; for it had passed the aperture of the basin, and had undergone "extension" to such a degree that to withdraw it was impossible. A few blows with a hammer, and I knocked a hole in the basin some 10 in. from the outlet. Then two segments fell away from the neck, and the infant was released. The only trace of injury was somewhat severe swelling of the face, which readily disappeared. A careful measurement showed the diameter of the circular outlet to be 3·85 in. The child was at full term and well developed. I am, Sirs, yours truly,

Jan. 21st, 1889. GEORGE R. BUTLER.

JABORANDI IN INTERMITTENT AND REMITTENT FEVER.

To the Editors of THE LANCET.

SIRS,—In your issue of Dec. 15th, 1888, p. 1215, "L.R.C.P." asks concerning the effect of jaborandi on the cold stage of intermittent fever. This garrison is quartered in a malarious region, which at one time was known as "the chancel house of the army." I have used pilocarpine in about six cases—one-tenth to one-eighth of a grain hypodermically,—with the effect of cutting short the attack almost at once. I would be more explicit, but my time is short. Not one of the cases that I remember had any further chill or fever. I found it best when administered on the first symptom of a chill.

I am, Sirs, yours faithfully,

Fort Gibson, I.T., Jan. 8th, 1889. U.S. ARMY.

AN ALARM CLINICAL THERMOMETER.

Mr. Wilberforce Arnold of Belfast, who wrote to a contemporary last week advocating the introduction of electrical alarms in connexion with thermometers, has urgently requested us to publish a description of what he terms his "second discovery"—viz., the application of the same principle to clinical thermometery. As, however, he does not enter into any details concerning, first, the manner of the connexion made with the clinical thermometer, and, secondly, the way in which he would meet the necessity for having the thermometer continuously in contact with the body, we do not deem it worth while to insert Mr. Arnold's description. The originality of the idea would, we fear, not be equalled by its utility. If practicable, it would have at least this one obvious objection—viz., that it would encourage a disregard of other indications quite as grave as those to which the "alarm" would call the nurse's attention.

Mr. A. U. Comber.—We must refer our correspondent to letters in our issues of Nov. 22nd and Dec. 6th, 1884, in which full information is given on the subject.

Mr. W. D. Eddowes.—53, Berners-street, London, W.

"THE EXAMINATION IN CHEMISTRY AT THE ENGLISH CONJOINT BOARD."

To the Editors of THE LANCET.

SIRS,—It would be interesting to many to learn how many students have been rejected out of the total number examined on Jan. 1st. If 100 only failed each quarter—and that, I hear, is a moderate estimate—1300 guineas are the "unearned increment of gain" to the Conjoint Board, as the same fees have to be paid again? Examiners should remember that only three months ago a strong manifestation of public opinion was given against the present system of examinations, and not draw the bow too tightly. However necessary may be a knowledge of anatomy or physiology to a surgeon or physician, a knowledge of chemistry is of minor importance.

I am, Sirs, yours truly,

Jan. 14th, 1889. A MULCTED PARENT.

Mr. G. D. Kerr would no doubt obtain full information by applying to the Secretary of the Brussels Medical Graduates' Association, Dr. Pocock, the Limes, St. Mark's-road, North Kensington.

Tyro.—The use of the titles named is quite legitimate. Beck's star microscope would do.

Mr. Irving G. Smith (Denver).—Certainly not, when the exercise is not carried to excess, and a well-constructed machine is employed.

ERRATUM.—In the fifteenth line of the article "Comparative Value of Chemical Substances as Antiseptics," published last week, p. 144, for "boiled" read *turbid*.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Wilks London; Prof. Annandale, Edinburgh; Mr. Jonathan Hutchinson, London; Dr. Charteris, Glasgow; Dr. Broadbent, London; Mr. P. Hoey; Dr. Macdonald, Beith; Dr. Mayne, Longford; Dr. Handford, Nottingham; Dr. J. F. Payne, London; Mr. C. Farmer, London; Dr. G. Bantock, London; Dr. Herringham, London; Mr. Nelson Hardy; Dr. Lawless, London; Mr. T. Geratz, Nottingham; Hon. Mrs. Leslie Melville, London; Mr. Barnardo, London; Messrs. Partridge and Cooper, London; Mr. Girdlestone, Melbourne; Messrs. Everest and Co., London; Mr. Gordon, Bristol; Dr. Gowers, London; Mr. Pugin Thornton, Canterbury; Mr. F. R. Fisher, London; Messrs. Blackie and Co., Newcastle; Dr. Clouston, Edinburgh; Messrs. Brady and Martin, Newcastle; Mr. Pilkington, Ormskirk; Messrs. Bush and Co., London; Mr. Butler, London; Mr. Ryan, London; Mr. Lawson Tait, Birmingham; Mr. Thatcher; Messrs. Wilson, Salomon, and Co., London; Mr. Willis, Chatteris; Dr. Spehl, Brussels; Mr. Van Praagh, London; Mr. J. P. R. Jamison, Broughshane; Mr. Hurry Fenwick, London; Mr. P. E. Hill, Crickhowell; Dr. Suckling, Birmingham; Mr. G. C. Wilkin, Burwash; Dr. Handford, Nottingham; Dr. W. Walter, Manchester; Mr. G. Padley, Swansea; Dr. Dearden, Church; Mr. Radford; Mr. Coles; Dr. C. S. Watson, London; Mr. B. Hill, London; Mr. J. H. Evans, Machynlleth; Rev. E. Ford; Mr. L. Humphry, Cambridge; Mr. Cantz, Wiesbaden; Messrs. Sutton and Sons, Reading; Mr. Sotheran, York; Mr. F. J. Allen; Messrs. Lee and Martin, Birmingham; Dr. Hardwicke, Dovercourt; Messrs. Smith and Co., Birmingham; Mr. R. J. H. Gibson, Liverpool; Dr. Danford Thomas, London; Dr. Douthwaite, Sydenham; Messrs. Griffin and Co., London; Dr. Duka, London; Dr. Neale, Hampstead; Mr. Mark Judge, London; Mr. Comber, Winchfield; Mr. O'Callaghan, Carlow; Mr. A. M. Sheild, London; Dr. Collins, Manchester; Dr. Pierce, Manchester; Mr. Chavasse, Birmingham; Dr. Brett, Watford; Mr. G. G. Parsons, Coventry; Mr. Sandiland, London; Dr. Griffith; Mr. Terry, Kent; Mr. Sweeting, London; Dr. Walsh, New Ross; Mr. Duncan, Aberdeen; Mr. Booker, Coventry; Mrs. Gilmour, London; Dr. Daly, Ireland; Mr. Calderwood, London; Mr. Morgan, Anglesea; Dr. Steen, Rotherham; Rev. T. W. Ward, Guildford; Messrs. Bennett Brothers, London; Mr. Archer, Alwick; Mr. Southam, Manchester; M. D.; W. S., London; Tyro; A. C.; M. M.; Nemo; Hydrop, London; N. British Plumbing Co., London; An Old Correspondent; Borough Hospital, Sheffield; M.D., Barrow; Jetty.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Pullin, Sidmouth; Mr. Ross, Manchester; Mr. Atkinson, Kelso; Dr. Rake, Trinidad; Mr. Bingham, Somerset; Mr. Sanson, London; Mr. Black, Inverurie; Mr. Parsons, Hastings; Rev. Middleton-Wake, Kensington; Mr. McMordie, Belfast; Miss Gillinglax, Taunton; Mr. Harris, London; Mr. Arrowsmith, Bristol; Mr. Ryan, Cork; Mr. Arnison, Newcastle; Mr. Wood, Tavistock; Mr. Jackson, Lincoln; Dr. Dunn, Preston; Mr. Darby, Antrim; Dr. Wilson, Penistone; Dr. Johnston, Sheffield; Mr. Osborn, Southboro'; Mr. Fairfax, York; Dr. Ballmore, Penzance; Mrs. Ravenhill, Croydon; Mr. Owen, Wales; Mr. Horne, Cleveland; Dr. Cresswell Hewett, London; Mr. Kirkham, Downham Market; Mr. Griffin, Preston; Mr. Matthews, Penzance; Mr. Reilly, Ireland; Mr. Blenkarne, Leicester; Mr. Forbes, Halifax; Mr. Breen, Fermanagh; Mr. Gondons, Villeneuve; Mr. Heywood, Manchester; Mr. Kemp, Castleford; Mr. Bower, Cheshire; Mr. McBeatts, Banffshire; Sister Marie, Lancs.; X., Hull; W. O. M., Peterboro'; C. A. C. S., Wilts; Sound, London; Hastings, London; J. C., Peterboro'; Vanderdecker, London; G. M., London; Saxon, London; Fides, Dewsbury; Delta, London; Alpha, Chiswick; Mrs. J., Yorks; M.D., Manchester; Crowland, Peterboro'; Sydney, London; co. Durham, London; J. H. P., Bow; H. C. D., Herts; Alpine, London; Durham County Asylum; Veritas, London; H. M. D., Sevenoaks; Bradford Infirmary; Nurse, London; E. H. A., London; B. W., London; The Hospital, Rotherham; Medicus, Margate; A. B., Birmingham; York Retreat; E. Z., Wantage.

British and Colonial Printer and Stationer, National Reformer, North-Western Gazette, Builders' Weekly Reporter, Mining Journal, Labour Tribune, The Manufacturer, Bath Chronicle, Ilfracombe Chronicle, Liberal and Radical Annual, Peterboro' and Hunts Standard, South Wales Press, Reading Mercury, Central Glamorgan Gazette, Herald and Weekly Free Press, Waterford Citizen, Dunfermline Saturday Press, Hertfordshire Mercury, Surrey Advertiser, Weekly Telegraph, Hackney and Kingsland Gazette, Kent Times and Tribune, Surrey Times, Hull Express, Eastern Daily Press (Norwich), Bournemouth Visitors' Directory, Northampton Herald, &c., have been received.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year	£1 12 6	Six Months	£0 16 3
TO CHINA AND INDIA		One Year	1 16 10
TO THE CONTINENT, COLONIES, AND UNITED STATES		Ditto	1 14 3

Post Office Orders and Cheques should be addressed to The Publisher, THE LANCET Office, 423, Strand, London, and crossed "London and Westminster Bank, St. James's-square."

ADVERTISING.

Books and Publications (seven lines and under)	£0 5 0
Official and General Announcements	0 5 0
Trade and Miscellaneous Advertisements	0 4 6
Every additional Line	0 0 6
Front Page per Line	0 1 0
Quarter Page	1 10 0
Half a Page	2 15 0
An Entire Page	5 5 0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post Offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on pages 2 and 3, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H Smith and Son's Railway Bookstalls throughout the United Kingdom and all other Advertising Agents.

Agent for the Advertisement Department in France—J. ASTIER, 66, Rue Caumartin, Paris.